EMERGENCY ACTION PLAN

City of Burbank Public Service Department Water-Light-Power

MEMORANDUM

DATE: July 25, 1995

TO: Robert R. Ovrom, City Manager

FROM: Ronald V. Stassi, General Manager, P.S.D.

SUBJECT: Emergency Action Plan

For the past three years, P.S.D. has been using its own Emergency Action Plan (EAP). The EAP was developed by P.S.D. staff to meet the State of California, California Administrative Code Title 8, Section 3220, and it was reviewed by Mr. Bill Taylor and Mr. Naresh Gupta. A draft of the latest version of the EAP is attached.

At first, the EAP concerned itself mostly with evacuating safely from P.S.D.'s buildings. We held drills to exercise this portion of the plan. The latest revision (July 1995) includes more specific details of Escape Routes and Maps and System Restoration Guidelines for Power Plant and SCADA Center personnel.

The EAP has proven to be a useful Standard Operating Procedure for P.S.D., one which readily meshes with the City's overall disaster plan (it was followed during the 6.8 Northridge earthquake on January 17, 1994). Other departments may find it useful to develop their own versions of the EAP. It is our goal to update this plan every year.

RONALD V. STASSI
General Manager
Public Service Department

RVS:DDB:ph

Attachment

cc: John Nicoll
Rich Baenen

B:DDB/EAP-MEMO.95

CITY OF BURBANK
PUBLIC SERVICE DEPARTMENT

EMERGENCY ACTION PLAN

REVISION #1

COMPILED BY: DEV BIRLA, SENIOR ELECTRICAL ENGINEER

JULY 1995

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GENERAL MANAGER'S STATEMENT

In an emergency, your safety is our first and most important consideration. This Emergency Action Plan outlines the actions you should take during emergencies to ensure your safety. Of particular concern are emergencies due to fires, chemical spills, and earthquakes.

The many variables surrounding an emergency are often unpredictable. This Plan provides guidelines and procedures that you will need to apply as circumstances require. Additional actions may be necessary. It will be my responsibility, or that of my designee at the site, to make such a judgment.

The time to prepare for an emergency is now. Be familiar with the overall surroundings of your work environment, including potential hazards. Learn the automatic responses to each type of emergency. Take the time to read and understand the contents of this Plan.

Gregory Simay and John Ostly are responsible for both staging rehearsals of the Plan and for coordinating these rehearsals with the City's Disaster Coordinator and the PSD Safety Office. The Emergency Action Plan is revised every year and July 1995 is the latest revision. If you have any suggestions for improvement, please contact any of those mentioned above. Your feedback is important to us.

Remember, the key to dealing with an emergency is preparedness.

Ronald V. Stassi
General Manager
Public Service Department

July, 1995

1.0 PLAN OVERVIEW

Emergency preparedness recognizes that emergencies can arrive with little warning, quickly worsen, and cause great destruction. Some emergencies may involve PSD facilities without immediately endangering the wider community. A building fire or hazardous chemical spill would be two of the most common examples of such emergencies. Those individuals primarily at risk are PSD employees and their visitors. Other emergencies can result from a region-wide disaster, such as a severe earthquake or the release of a poisonous gas (eg., chlorine) over a wide area. In any event, you must know how to take care both of yourself and of PSD facilities. Only then will you be in a position to help others.

1.1 FOCUS OF THE PLAN

This Plan focuses on personnel response to the six most probable emergencies that might occur at PSD: **fires, chemical spills, earthquakes, major storms and flooding, civil disturbance/attack, and system emergencies.** Following the proper procedures in response to these types of emergencies will help you to respond to any other emergency, such as an airplane crash in the PSD yard, flooding due to major storms, civil disturbance, systemwide power outage, or major water leak. Refer to Sections 2.1 through 2.12 for more detail.

1.1.1 Management of the Plan

The General Manager, or his designee, will serve in the Command/Policy Section of the **Emergency Operations Center (EOC)**. The EOC is located at 1845 North Ontario Street in the Fire Training Center. The Field Services Manager, or his designee, will operate the **Field Command Post** in the PSD yard. Gregory Simay, or his designee, will act as Operations Representative at the EOC. Other division managers will function in various capacities as deputies to the General Manager. These people are responsible for overall management of PSD's emergency response. The primary management objectives are:

A. Assist the Fire and Police Departments in minimizing deaths and injuries.

B. Carry out emergency shut-down and evacuation.

C. Maintain security of the facilities.

D. Minimize property damage and loss.

E. Recover from an emergency with minimum interruption to PSD operations.

All personnel will respond to the direction of the Disaster Manager, who will report directly to the Command Policy Section of the EOC. The identity of the Disaster Manager will depend upon the nature of the disaster, but will be of Department Manager level, or his/her designee.

1.2 EMPLOYEE RESPONSIBILITY

1.2.1 Working Hours

During emergencies, communications may be disrupted and you may lose contact with other employees. To ensure a quick and safe evacuation when an emergency arises during normal working hours, you are to:

A. Preserve yourself first.

B. Evacuate to a predetermined evacuation zone.

C. Upon evacuation, confirm your location and safety with the Zone Warden or your supervisor.

D. Await instructions from management or emergency response personnel.

Each of these steps are discussed below:

A. Preserve Yourself First

The most important thing you can do for your self-preservation is to remain calm and use common sense. During an earthquake, for example, follow the GUS Rule: Get Under Something!

B. Evacuate to a Predetermined Evacuation Zone

PSD has been divided into fourteen Work Zones, with each zone having an assigned Zone Warden and alternate. When it is necessary to evacuate from your Work Zone, you will proceed to one of eleven designated PSD Evacuation Zones.

See Section 3.0 for Emergency Evacuation Plan and Appendix N - Plot Plan of working areas and evacuation zones for more details.

The Zone Wardens, or alternates, will instruct you when to evacuate to the proper Evacuation Zones. They will also assure that evacuation is proceeding in an orderly manner. The locations of any injured or trapped employees will be noted and the **Field Command Post** will be informed. If it is safe, the **Field Command Post** will be located in the Field Services Office. Section 3.0, which outlines the Emergency Evacuation Plan, also defines the Work Zones and Evacuation Zones and identifies the Zone Wardens.

C. Confirm Location and Safety With Supervisor or Zone Warden

Once you have arrived at an Evacuation Zone, make your immediate supervisor or Zone Warden aware of your presence and whether or not you are injured. If your immediate supervisor is not available, inform any available manager of your presence.

D. Await Instructions From Emergency Response Personnel

Remain in your Evacuation Zone until released or given further direction by your supervisor or responsible emergency personnel. After conditions have stablized, you will be directed to report to the Field Services Division Management personnel (unless you have been previously assigned disaster duties by your division management personnel). They will be able to schedule and direct the available personnel as required and will be in contact with the (E.O.C.). The Field Services Manager is not scheduled for E.O.C. duty and is the responsible person at PSD.

1.2.2 Non-Working Hours

PSD employees are away from the work place approximately seventy-five percent of the time. Employees will most likely be at home when a disaster occurs. Having home and vehicles properly prepared will increase safety for employees' families, reduce costly damage, and allow employees to report to their worksites in a shorter period of time.

If you are at home when a disaster occurs, first ascertain that your family and home are safe. The Guard House will keep records of those employees who called in and whether or not they are able to report to work. Contact the Guard House at (818) 238-3778 (except SCADA Center and Power Plant Personnel)

to receive instructions and assignments. If the phone service is not available and it is safe to travel, report to the Guard House for further instructions. If it is not safe to travel, contact the department by phone as soon as service is available. If it is not possible for you to report to your work place and you possess key skills, consider reporting to a similar agency closer to home.

(see Red Cross Manual).

For information, listen to the City's emergency broadcasting radio station KROQ 106.7 FM, call the City's "800" number (800-994-EURB or 800-994-2872), call 800-953-9003 to obtain the status of events or to learn if you are being recalled to duty. (This number is a one-way communication channel), or contact the Guard House at the number listed above at 238-3778.

The EMERGENCY OPERATIONS CENTER - located at 1845 N. Ontario St. Telephone number 238-1522 is a voice mail line used only for drills and other information under normal conditions. Telephone number 238-1515 is Electric's number and 238-1516 is for Water.
If the E.O.C. is activated, the PSD property guard will notify the appropriate water and electric personnel who are on the call list and are supposed to report directly to the E.O.C. If the guard is unable to make contact with them and it is obvious that a major disaster has occurred, these personnel should report directly to the E.O.C. as soon as possible.

1.2.3 Where to Report to Work

All personnel should report to the following locations:

Priority	Location
1.	All PSD Electrical employees, except for SCADA Center personnel, Power Plant personnel, and those assigned to the Emergency Operating Center (EOC) - report to: PSD Yard 164 West Magnolia Blvd. Primary site of the **Field Command Post**

2. SCADA Center personnel- report to:
SCADA Center
1811 North Ontario Street

3. Power Plant personnel- report to:

Power Plant Production
Power Production Control Room or
Superintendent's Office

4. Personnel assigned to E.O.C.- report to:

Emergency Operating Center
Fire Training Center
1845 North Ontario Street

(see list of personnel to report to EOC)

1.3 FIELD COMMAND POST

The **Field Command Post** may be defined as a place where most of the field operations will be coordinated with the EOC and other City departments. The **Field Command Post** will be located at 164 West Magnolia Blvd. in the PSD yard. If the buildings are safe, Field Superintendents or Field Supervisors will delegate from their normal worksites. If the buildings are not safe, a temporary **Field Command Post** will be established somewhere on the PSD yard property. If the PSD yard cannot be used, a secondary site will be determined at that time. If requested to report, Commercial Section, Engineering, and secretarial staff, should report to the **Field Command Post**. Contact the offices mention in Section 1.2.2 before reporting to work.

1.3.1 Line of Authority

The senior qualified person reporting to work, or the senior qualified person in communication with the EOC, will be in charge. See Emergency Table of Organization, Appendix A.

Example #1: Field Command Post

The **Field Command Post** will be located at 164 West Magnolia Blvd. in the PSD yard. The Field Services Manager will be in charge of the **Field Command Post**. In his absence the construction superintendent or another management person will be in charge. If the buildings are safe, the Field Services Manager or other managers will delegate

from their normal worksites. If the buildings are not safe, a temporary **Field Command Post** will be set up in the PSD yard.

Example #2: Power Production/Operation Sections

The shift supervisor will be in charge of the Power Plant until Mr. Dennis Moran, or any other management employee, arrives. The load dispatcher on duty will be in charge of the Operation Section until the Senior Electrical Engineer in charge of the SCADA Center, or another management employee, arrives.

Example #3: Electrical Maintenance/Construction Sections

The senior qualified Line Mechanic, Senior Electrician, Senior Test Technician, or Senior Communication Technician, reporting to work will be in charge until the first line supervisors or the Electrical Superintendents arrive.

Example #4: Water Maintenance/Construction/Operations Sections

The senior qualified Senior Water Plant Operator, Pipefitter Operator, Pipefitter, Senior Water Plant Mechanic, or Water Meter Mechanic, reporting to work will be in charge until a leadworker, supervisor, or superintendent arrives.

Example #5: Electrical Engineering/Planning Sections/Mechanical Engineering Water Engineering/Planning Sections

The senior engineering staff member reporting to work will be in charge until a management-class engineer arrives.

Example #6: Reports of Family Members

If a disaster takes place during normal working hours, Mr. John Ostly, or his designee, may assign personnel to report on the status of family members.

All areas of responsibility are to periodically (at no more than half-hour intervals) inform the **Field Command Post** of major problems by radio or telephone (see Electrical Damage Report Sheet Priority Check List, Appendix C, and Water Damage Report Sheet Priority Check List, Appendix F) and the **Field Command Post** will convey this information to the EOC.

1.3.2 Activate the Field Command Post

When it has been deemed likely that an earthquake, or any other natural disaster, of a high magnitude, has resulted in

major damage to the City, the **Field Command Post** will be activated. See Activate **Field Command Post** Checklist, Appendix E for more details.

1.3.3 Alert Procedure

The most effective alert procedure is for all employees to report to work as soon as possible after a major earthquake or other major disaster. Depending upon the circumstances, personnel may be notified by the **Field Command Post** to report for work. See Personnel Assigned to Emergency Operation Center, Appendix B.

If the **Field Command Post** is unable to contact all desired personnel by telephone, radio, or pager, the **Field Command Post** shall notify the EOC of all personnel not contacted. The **Field Command Post** may dispatch messengers and shall maintain a log of those employees who were notified to report to work, as well as when each person was so notified.

1.4 ELECTRICAL DIVISION DAMAGE ASSESSMENT

1.4.1 Aerial Survey

If requested by the Police/Fire Departments, PSD Electric operations personnel may fly to assess the damage to the electric system and to report the damage to the **Field Command Post**. They will fly in priority as outlined on pages 7-9.

1.4.2 Land Survey

Personnel will be assigned to survey all facilities and to report any damage to the **Field Command Post**. They will report in priority as outlined on pages 7-9.

The **Field Command Post** will prioritize damage reports from all sources and assign personnel and equipment as required to isolate and secure the area. The **Field Command Post** may delegate this work to the appropriate sections.

1.5 ELECTRICAL DIVISION DAMAGE REPORT CHECKLIST

This priority list assumes that a major disaster has occurred, that employees do not know the extent of damage to the electrical system, and that responsibility of coordinating disaster surveying at the **Field Command Post** has been assumed, but that the EOC is not yet activated. Proceed with the following priority list for damage assessment until the EOC

directs otherwise. When choosing routes, consideration should be taken of damage caused to freeway over- or underpasses, and major streets.

The following list will assist in dispatching available personnel as they report for duty.

1.5.1 First Priority

A. Tie with Los Angeles "RS-E" from Valley Switching Station

B. Olive Generating Units #1, #2, #3, and #4

C. Magnolia Generating Units #3, #4, and #5

D. Valley Switching Station

E. Olive Switching Station

F. Lincoln Switching Station

G. 69-kv lines within the City
(Olive-Valley, Lincoln-Valley, and Olive-Lincoln #1 and #2)

H. Toluca-Olive-Western T-O-W (normally open line, if in service)

1.5.2 Second Priority

A. 34.5 kv subtransmission system- with at least one line to distributing/customer stations providing service to the EOC, hospitals, City Hall and other key City buildings, emergency broadcasting radio station KROQ, NBC and other critical communication facilities, emergency shelters and other critical loads (such as critical water/sewer facilities, the airport tower and critical traffic signals). Refer to Appendix O for more details.

B. Distributing/Customer stations- 34.5 kv/4.33 kv or 12.47 kv side, and service to hospitals, radio station KROQ, NBC, emergency shelters, and other critical loads, as stated in section 1.5.2.A and refer to Appendix O for more details.

C. The remaining 34.5 kv subtransmission system- with at least one line to each distributing or customer station

D. The remaining 34.5 kv subtransmission system

1.5.3 Third Priority

A. Feeders with critical patients connected

B. Water pump stations, especially the GAC facility, Valley Pumping Plant, Well #6, the five MWD connections (B-1, B-2, B-3, B-4, and B-5), and the Water Reclamation Plant

C. 12.47 kv feeders- serving the high rise buildings and Media City Mall and the remaining 12.47 kv feeders

D. All remaining distribution feeders

E. All distribution transformers/service drop problems

F. Street lighting- circuits on major boulevards

G. All remaining street lighting circuits

H. Anything else not covered above

1.6 ELECTRICAL FIELD EMPLOYEE INSTRUCTIONS

Employees assigned to disaster survey shall include, but not be limited to, the following observations. Most employees are aware of what to look for, but this list may be used as a guideline. The typical instructions to be given to field employees working disaster survey are as follows:

1.6.1 Switching Stations, Distributing Stations, and 34.5 kv Customer Stations

A. Check for major damage to the control room walls and roof before entering.

B. Check all relays and other equipment in the control room to determine the physical damage.

C. Before entering the station, check steel structures inside the station.

D. Check any visual damage to circuit breakers, disconnects, station risers, power transformers, regulators, capacitor banks, getaways, and other electrical equipment in the station.

E. Check targets of all relay operations

1.6.2 Overhead Lines

Check for all abnormal conditions (such as downed conductors, two different phase conductors touching each other, etc.) as well as the items listed below. The fault indicators shall be utilized to expedite the location of field problems while the lines are patrolled. The checklist is a guideline only, and shall not be limited to the items listed.

A. Condition of Hardware and Apparatus: check for broken or chipped insulators, pole switches indicating need for adjustment or repair, bulged or discolored capacitor units, broken or cracked bushings, blown primary fuses, etc.

B. Condition of Poles: check for leaning poles, broken or canted crossarms, washout or excavation around poles or anchors, hazardous or deteriorated conditions, etc.

C. Condition of Conductors: check for slack conductors or unequal sags, damaged or burned connectors or jumpers, downing of conductors, two phases wrapped together, inadequate ground clearance, conductors not properly attached to insulators, broken tie wires, etc.

D. General Conditions: check for foreign objects in lines, mylar balloons, tree limbs or any other objects, missing or poorly secured mouldings or conduits, debris at customer stations, slack guys, loose risers, exposed ground or neutrals on risers, etc.

E. Terminations (Underground to Overhead): check for underground cable settling in risers, indications of oil or compound leaks on potheads, broken or separated risers, status of fault indicators, etc.

NOTE: Visually check for any abnormal conditions of underground equipment and structures within view while performing overhead circuit patrol.

1.6.3 Underground Lines

The disaster survey shall include, but not be limited to, to the following checklist:

A. Condition of Manhole Covers and Lids: visually check for adequate sealing and for any signs of leakage.

B. Structures: check for evidence of earth movement, subsidence and earth/pavement cracks, signs of leakage at wall and slab joints and

necking joints (wall to lid), abnormal conditions in concrete (such as large cracks, spalling, corrosion, or exposed reinforcing steel), switch support structure, and securely anchored ladders. Manhole entry procedures shall be followed before entering any underground structure.

C. Ducts: check for signs of leakage at cable ducts, duct plugs, and duct seals.

D. Submersible Equipment and Enclosures: check enclosures for bent or distorted RPM covers and for any other structural damage to the submersible enclosure support. Inspection of underground equipment shall include a check for excessive heat levels. Manhole entry procedures shall be followed before entering any underground structure. Thorough visual inspection around the structure and use of an infrared camera to check the status of electrical equipment inside a manhole is required.

E. Apparatus: Check for any oil leakage and loose mounting bolts, and verify that bonds/grounds are connected.

F. Cable: check for cables improperly positioned on the supports, distorted cables or cables that show evidence of movement, and for signs of cable fatigue.

G. Termination and Splices: check for bails that are overly tight on the elbows, distorted or bulging elbows, signs of tracking, distorted or bulging splices, and excessive heating of elbows and splices (using an infrared camera).

1.6.4 Padmount Switches and Transformers

A. Exterior Inspection: check for missing or damaged pentabolts, deterioration of concrete, water/sand/mud in or around the structure, structure movement, visual hazards, structure ground placement, and exterior damage to enclosures.

B. Internal Inspection: check for conditions which exceed the temperature limits by using hand-held infrared equipment, signs of termination overheating or distortion, blown fuses, missing or damaged switch tags, signs of contamination of insulator and terminations, tracking, damage or overheating of 600 amp gang-operated switches, and adequate cable clearance.

1.7 WATER DIVISION DAMAGE ASSESSMENT

1.7.1 Aerial Assessment

If requested by the Police/Fire Departments, assigned Water Engineering Section personnel will fly the water system and report damage to the **Field Command Post**. They will fly the priority as outlined on pages 12-14.

1.7.2 Land Survey

Personnel will be assigned to survey all facilities and report damage to the **Field Command Post**. They will report according to the priority outlined on pages 12-14.

The **Field Command Post** will prioritize damage reports from all sources and assign personnel and equipment as required to isolate and secure the area.

1.8 WATER DIVISION DAMAGE REPORT CHECKLIST

This priority list assumes that a major disaster has occurred, that employees do not know the extent of damage to the water system, and that responsibility of coordinating disaster surveying has been assumed at the **Field Command Post.** The following list will assist in dispatching available personnel as they report for duty.

1.8.1 First Priority

A. Reservoir No. 5 (reservoir pumphouse and chlorination station)

B. Reservoir No. 1

C. Reservoir No. 4

D. Palm Avenue pump and chlorination station

E. Lake Street GAC Facility (Well Nos. 7 and 15, forebay, and chemical feed station)

F. Valley Pumping Plant (booster station, forebay and chemical feed station, Lockheed Plant)

G. MWD B-1 connection

H. MWD B-5 connection

I. MWD B-4 connection

J. MWD B-2 connection

K. MWD B-3 connection

1.8.2 Second Priority

A. Reservoir No. 2

B. Reservoir No. 3 and radio tower

C. McClure Tank and pumphouse (B-29 and B-32)

D. Brace and Lamer Tanks

E. Haven Tanks and B-33

F. Groton Tank and B-22

G. Andover Tank

H. Belaire Tank and C pump

I. Starlight Tanks

J. Stough Tanks and pumphouses (A and B pump, reclaimed pumps)

K. Debell No. 1 Tank and Debell No. 2 pump

L. Debell No. 2 Tank

M. Wildwood No. 1 Tank and Wildwood No. 2 pump

N. Wildwood No. 1 pump

O. Sunset Canyon System (Sunset Canyon No. 1 pump, Sunset Canyon No.2 pump, Deer Canyon Tanks, and Twin Tanks)

P. Booster No. 30

Q. Via Montana Tanks

R. Paseo Redondo Tanks

S. Glendale/Burbank Interties

T. Pipeline: Hollywood Way, from San Fernando to Olive Avenue

U. Pipeline: Olive Avenue, from Hollywood Way to First Street

V. Pipeline: Palm Avenue, from First Street to Sunset Canyon Drive

W. Pipeline: Kenneth Road, from Verdugo Avenue (B-1) to MWD B-5 (including Jolley Valve Vault)

X. Pipeline: Parish Street, From Reservoir No. 5 to Tulare Avenue (B-4)

Y. Pipeline: Tulare Avenue, from Scott Road (B-4) to Hollywood Way

Z. Pipeline: Magnolia Avenue, from Sunset Canyon Drive to Kenneth Road

AA. Pipeline: Scott Road, from Tulare Avenue (B-4) to San Fernando

BB. Pipeline: San Fernando, from Scott Road to Kenneth Road

CC. Well No. 6A

DD. Well No. 17

EE. Well No. 12 A

FF. Well No. 13

GG. Well No. 10

HH. Well No. 11

II. Well No. 12

1.9 WATER FIELD EMPLOYEE INSTRUCTIONS

Employees assigned to disaster survey shall include, but not be limited to, the following observations. Although most employees are aware of what to look for, the following list may be used as a guideline. The typical instructions to be given to field employees working disaster survey are as follows:

1.9.1 Reservoir Dams (Reservoir Nos. 1, 4, and 5)

A. Check for damage to walls and roof. Check for subsidence or evidence of leaks or slope failures.

B. Check for leaks on adjacent piping. Check for column failures inside the reservoirs and other visible interior damage.

C. Check for downed electrical and communication lines.

D. Check for water flows in subdrain systems.

E. Check for site damage (downed tree, fences, etc.)

1.9.2 Small Reservoirs and Tanks

A. Check for damage to walls and roof.

B. Check for leaks on adjacent piping.

C. Check for road or slope damage.

D. Check for interior damage to concrete reservoirs.

E. Check for downed electric or communication lines.

F. Check for tank foundation damage or other on-site damage such as fences, banks, trees, etc.

1.9.3 Pipelines

A. Check for leaks.

B. Check for evidence of earth movement, subsidence, and earth/pavement cracks.

C. Check for valves that might be covered or inaccessible.

D. Check for leaks from large valve vaults.

1.9.4 Wells and Boosters

A. Check for piping leaks on equipment near wells or boosters.

B. Check for damage to motor engines or pumps.

C. Check for downed electrical and communication lines.

D. Note if wells or boosters are in "on" or "off" position. If "on" but there is no power, turn off and advise supervisor when survey is complete.

E. Check for site damage (downed fence, tree, bank, roads, etc.)

F. Check buildings and vaults for structural damage.

1.10 GENERAL EMPLOYEE (EXCLUDING FIELD PERSONNEL) INSTRUCTIONS

As stated in section 1.2.2, if you do not live locally or are not preassigned to the EOC or other special function, first call to confirm that your presence is needed at work. All employees from the following sections shall report to the PSD Yard:

Electrical Engineering, Water Engineering, Commercial, PSD Administration, Warehouse No. 2, Field Services, Garage Shop, and all secretarial staff.

Other employees who should report to the PSD yard include field personnel from:

the Line section, Electrical Equipment, Electric Test Shop, Radio and Communications Shop, Water Operations, and Water Construction and Maintenance section.

All other personnel not specifically assigned to the EOC, the SCADA Center, or the Power Plant are also to report to the yard. Circumstances, including the nature of the disaster and damage caused by it, shall dictate specific task assignments for groups or individuals.

Following are possible assignments for the various sections:

A. PSD Administration

May assist the General Manager in requesting mutual aid from neighboring cities and the Cities of Alameda, Palo Alto, and Santa Clara during the restoration period. Assist the General Manager and **Field Command Post** as required.

B. PSD Engineering
Provide the EOC with any information regarding service to

critical facilities as required. Work under the direction of the **Field Command Post** in keeping record of facility damages due to the disaster. Assign work orders and job orders to carry out emergency shutdowns or minor repairs of the electrical and water systems. Assist Warehouse No. 2 and the Purchasing Division in the procurement of equipment or materials required during the emergency. Keep track of labor and materials used for each work order and job order. Engineering personnel may be assigned to aerial damage surveys. Monitor the MWD Member Area Response System (MARS) radio.

C. PSD Warehouse No. 2

PSD Warehouse No. 2 will have a vital role in any major emergency. Warehouse No. 2 will work closely with the Purchasing and Engineering Divisions to provide materials and equipment required during an emergency. Materials should be kept in stock, if possible. An active vendor list and good relationships with vendors should also be kept current.

D. Field Services

Will assist other sections as required in miscellaneous functions. Garage Shop, Carpenter Shop, Metal Shop, Paint Shop, and the Guardhouse will also have roles to play. The guardhouse will be informed of all emergencies and will be important in relaying such information to PSD management and employees.

E. PSD Secretarial Staff

Various miscellaneous functions such as typing, logging, keeping records, keeping track of personnel reporting for duty, time cards, etc. The Electrical and Water secretarial staff may report to work without calling in first.

NOTE: In the event of a natural disaster, any employee may be given assignments other than his/her normal duties.

1.11 RECORDKEEPING

If the Governor or President declares an emergency, proper documentation for financial aid must be kept. If an emergency is not declared, proper recordkeeping is still required. The senior employee in charge of the **Field Command Post** will assign personnel to recordkeeping. Field personnel with needed skills shall not be used.

Engineering or secretarial staff shall be used for recordkeeping, typing, and answering phones.

A detailed accounting of all labor, materials, equipment, and services for each job shall be kept. A work order number shall be assigned to each job and, if possible, photographs of each job shall be obtained.

NOTE: All employees shall be paid per their Memorandum of Understanding. All employees shall be reimbursed for documented, out-of-pocket expenses, and private vehicle usage.

(see various recordkeeping forms required in Appendix J)

2.0 RESPONDING TO EMERGENCIES

2.1 RESPONSE TO FIRES

2.1.1 PSD Alone Affected by Fire

Upon discovering a fire, which may require evacuation of the building, notify the Burbank Fire Department immediately by dialing "7-9-1-1" from a PSD telephone, or "9-1-1" from outside or public telephones. Also contact the guard on duty, at 9678. The guard will sound the alarm. If it is deemed safe to do so, personnel who have been properly trained may use fire extinguishers to attempt to extinguish the fire. If the fire cannot be extinguished or controlled by use of available fire extinguishers, evacuate the area. Zone Wardens, as directed in their training, are to proceed with evacuation of the building to the predetermined locations.

The alarm will consist of ten (10) short, rapid blasts from the horn at the guardshack. When this alarm is sounded, Zone Wardens and other employees are to be alerted to a problem or emergency in the area. This includes, but is not limited to, fires. Other disasters this alarm may apply to include toxic chemical spills, earthquakes, bomb threats, etc. After receiving instructions to evacuate, proceed to the building exit and remain outdoors until directed by management to return.

The SCADA Center Control Room, Computer Room, and Uninterruptible Power Supply (UPS) Room are equipped with an automatic halon fire extinguishing system. If the fire is not noticed by an employee, the system detector will detect the fire and activate the fire alarm. The alarm will emit a slow pulsating sound. The alarm board panel will indicate which detector has been activated and in which location. Contact the Fire Department immediately and attempt to

extinguish the fire as discussed in the first paragraph above.

Should a second detector be activated, the fire alarm will change to a faster pulsating sound. At this time, evacuate the building immediately. There will be only thirty seconds to evacuate the building before the halon system is discharged.

If the fire is located in a hazardous area (i.e., chemical storage areas, Power Plant structures which have thermal insulation containing asbestos, or a hazardous waste area), vacate the area immediately and notify the Fire Department. Employees trained in the use of self-contained breathing apparatus (SCBA) and who have had hazardous communication training on the materials affected, may attempt to extinguish the fire with available fire extinguishers. However, this may be done only after putting on the SCBA and only if it is deemed safe to make the attempt. If the fire cannot be safely controlled, evacuate the area immediately. In most circumstances, firefighting should be left to Fire Department personnel. Follow evacuation procedures as outlined in the Emergency Evacuation Plan (Section 3.0).

After an area has been safely evacuated, the guard will direct emergency personnel to the affected area, and notify the PSD Safety Coordinator and any affected managers.

2.1.2 Urban/Interface Fires

In case of a "normal" fire, the Fire Department will contact the electrical offices during normal working hours, or the guard house after normal working hours. However, if the nature of the fire is such that it has spread to a wider area of the city and the EOC is activated, the **Field Command Post** may face the following problems:

A. The fire may become a major threat to electrical facilities.

B. PSD may be requested to open lines from the SCADA Center or a partial line in the field to avoid damage to property.

C. The Electrical Distribution Section will determine if an entire line or a portion of a line needs to be taken off to avoid loss of property and will coordinate with the SCADA Center if the EOC has not been activated.

D. The Water Division may be requested to assist in increasing water supplies by operating pumps, rerouting or increasing flows, or operating valves.

Should these, or any other, problems develop, follow the steps listed below:

A. Establish communication with the EOC.

B. Determine the nature, extent, and location of the fire. Determine how this fire affects electrical and water facilities and service to the customers.

C. Contact the EOC Operations Section to determine what assistance the Fire Department will require from PSD.

D. If it is safe to do so, dispatch field crews to assess the damage or threat of damage to electrical or water facilities. Determine if the fire is a major threat to the critical electrical or water facilities, such as the Valley Switching Station, Power Plant, Water Pumping Plants, and reservoirs.

E. Under direction of the Fire Department, take whatever action is necessary to avoid loss of human life or damage to public property. Assist the Fire Department in heavy rescue operations as necessary. Assist the Police Department in evacuations or traffic control if there has been loss of power to traffic signals.

F. For recordkeeping purposes and for reimbursement should a disaster later be declared, keep track of man-hours and materials used.

2.2 RESPONSE TO CHEMICAL SPILLS OR HAZARDOUS GAS RELEASE

Upon discovering a chemical spill or hazardous gas release such as a chlorine gas leak, notify the Burbank Fire Department immediately by calling "9-9-1-1" from a PSD telephone, or "9-1-1" from an outside or public telephone.

Follow the evacuation procedure outlined in the Emergency Evacuation Plan (Section 3.0). Secure the area affected by the chemical spill or hazardous gas release, such as a chlorine gas leak, by isolating it; deny entry to all unnecessary personnel. Use any posters and signs necessary to warn employees from the affected area. Appendix K indicates the location of major chemicals used by PSD, along with the necessary emergency telephone numbers. After an area has been safely evacuated, notify the Guard House. The guard will direct emergency personnel to the affected area and notify the PSD Safety Coordinator and any affected managers.

If a hazardous material spill, chemical spill, or gas leak is caused by electric and water facilities, all work will be

conducted under the direction of the Fire Department and the Safety Officer. Work will be conducted using the proper procedures already in place, and using proper dress and tools as required. Chlorine gas is a greenish yellow gas which has a pungent and irritating odor.

2.3 RESPONSE TO A CHEMICAL SPILL CHECKLIST

A. Respond to all reports of incidents involving hazardous materials. Isolate the area and call the Fire Department immediately. Report the incident back to the office or the guard. Inform other crews in the nearby areas to stay away from the site unless requested to assist.

B. If a hazardous material spill is caused due to electric and water facilities, work under the guidance and direction of the Fire Department and Safety Officer. If the contents of PCB in the transformer oil is already known and is less than 5 ppm, use and implement PCB clean-up procedures either by using PSD crews or implementing the contract in place.

C. Assist the Fire Department and Police Department in evacuations.

D. In so far as practical, take any necessary steps to protect or save human life and safeguard property.

E. In case of a chemical or gas leak in the Power Plant area, inform employees regarding the incident, the nature of spill or leak, and use signs or posters to keep employees away from that area. Direct the Power Plant personnel to work under the direction of the Hazardous Material Specialist and safety personnel.

F. In the event of a chlorine gas leak or spill, employees trained in the use of self contained breathing apparatus (SCBA) and chlorine cylinder repairs kits should attempt a repair, if practical and if adequately trained assistance is available. <u>Under no circumstances should an employee attempt a repair alone or without qualified assistance.</u>

2.4 RESPONSE TO EARTHQUAKES

If there is an earthquake, employees will have additional responsibilities other than personal responsibility of self and family. PSD employees have a responsibility to the public, especially to those who depend upon the water and electrical services that PSD provides. All efforts will be coordinated and directed towards the goal of providing those

services. During emergencies, your work hours may vary and you may be assigned duties that are not within your normal scope of work. Every attempt will be made to consider personal and family needs. However, some inconveniences can be expected.

The following instructions are designed to assist employees should a major earthquake strike the City of Burbank. Evacuation procedures are to be followed as outlined in the Emergency Evacuation Plan (Section 3.0).

2.4.1 Earthquakes that Occur During Working Hours

A. During the actual earthquake, keep calm.

If you are indoors, follow the guidelines below:

1. **Stay Indoors.** If you are already indoors, remain there. The most dangerous area is just outside the building. Do not attempt to evacuate during the earthquake.

2. **Secure Your Earthquake Kit and Take Cover** under sturdy furniture or a work table. If possible, clutch the legs of the furniture. If it moves during the shaking, move with it.

3. **Take a Position Away from Exterior Walls.** Position yourself near the center of the building whenever possible. Favorable alternative locations are: adjacent to interior columns, major interior structural walls, or other structurally strong building areas away from the exterior walls.

4. **Keep Away from All Glass** (windows, overhead lights, etc) as much as possible. Cover your head with a binder, trash basket, or any other protective material.

5. **Stay Calm.** Stay alert and aware of what is happening in the surrounding area. Remain protected and wait for the earthquake to stop. There may be aftershocks which could cause ceiling tiles, light fixtures, or other material loosened by the initial shock to fall. When it is safe to do so, evacuate and move to your designated Evacuation Zone.

If you are outdoors, follow the guidelines below:

1. **Remain Outdoors.** Move away from the buildings (a minimum distance equal to the height of the building). Keep away from overhead power lines and poles.

2. **Sit or Lie Down** on the ground to maintain stability.

If you are driving, follow the guidelines below:

1. **Slow the Car** to a safe stop and remain inside the car.

2. **If Power Lines Fall** on the car, do not panic. Stay inside the car. If you attempt to exit the car, you could provide a direct path to the ground for the electricity and be electrocuted.

B. After the Earthquake

When the shaking stops and you or the Zone Warden has determined that it is safe to evacuate the building, do so. If the designated exits are blocked, follow an alternate safe exit route. Move to, and remain in, the designated Evacuation Zones (see Section 3.0.). Stay away from the damaged buildings. If a designated Evacuation Zone is blocked or not accessible because of broken glass, damaged buildings, or exposed electrical lines, move to a different and safer Zone.

Wait in the designated Evacuation Zone, or a safe alternate Zone, to permit supervisory or emergency response personnel to account for your presence and safety.

When conditions have stabilized, you may be directed to report to the **Field Command Post** (unless previously assigned specific disaster duties by division management personnel). Field Services will schedule and direct available personnel as required and will be in contact with the EOC to coordinate Departmental needs. **The Field Services Manager is not scheduled for citywide EOC duty and is assigned as the PSD Emergency Coordinator. He is in charge of the Field Command Post.**

If a radio is accessible, tune in to radio station KROQ, FM 106.7, for emergency broadcast information, or call the City "800" telephone information number 1-800-994-2872 or the PSD Guard House at 238-3778. The Field Command Post will assign personnel to contact families of PSD employees if a severe earthquake takes place during normal working hours and employees are needed at work.

2.4.2 Earthquakes That Occur During Non-Working Hours

Should an earthquake occur during non-working hours, first ascertain that your family and home are secure. This is the time that all personal preparations at home will prove invaluable. After securing your home and family, and if it is safe to travel, report to your normal worksite and contact the Field Services Manager's Office. All City employees will be needed. Work will be conducted under the direction of the **Field Command Post** and the EOC. Refer to Sections 1.4 through 1.9 for more details regarding damage assessment.

2.5 RESPONSE TO MAJOR EARTHQUAKE CHECKLISTS

2.5.1 Field Command Post

A. Activate the Field Command Post, which will be located in the PSD yard. If safe to do so, use existing buildings. Otherwise, set up a temporary **Field Command Post.** Establish a link with the EOC and verify if the EOC has been activated. Ascertain if the radio and communication system is operational. Check PSD apparatus status. Establish availability and deployment list.

B. Direct predetermined personnel to conduct the aerial survey with the assistance of the Police Department, if necessary. Dispatch crews to assess damage to the various electric and water facilities. Report any damages to the EOC.

C. Report the status of the electric and water systems to the EOC. Emphasize availability of water for firefighting and power for critical facilities, such as hospitals, water and sewer facilities, etc. Special attention should be given to damage or leakage at water tanks and reservoirs.

D. Assess the impact of the disaster on PSD operational capability.

E. If required, assist the Fire Department in heavy rescue operations.

F. Begin emergency shut-downs as required and requested by the Fire Department.

G. Request outside help in resources after consultation with EOC.

H. Ensure that PSD personnel do not cross bridges until the bridges are inspected. Instruct personnel to keep away from areas where a hazardous spill is reported.

I. Keep logs and accurate records of time spent by PSD Electric and Water personnel on each job or work order established by PSD Engineering or secretarial staff.

J. Answer telephones. Provide information regarding the status of the electric and water systems to customers. Gather information from customer regarding water leaks, explosions in electrical vaults, or poles and wires on the ground, etc.

K. Assign personnel to contact families of PSD employees if an earthquake takes place during normal working hours.

2.5.2 EOC

A. Brief and update the Director of Emergency.

B. Brief the PSD Branch Directors and communicate with the **Field Command Post** and the SCADA Center.

C. Assess damage to electrical and water facilities.

E. Dispatch field crews based upon priority lists established.

F. Direct emergency shut-downs to minimize damage to life and public property.

G. If required, assist the Fire Department in heavy rescue operations. Be prepared to assist the Police/Fire Departments as needed.

H. Eventually restore the electric and water systems to normal conditions as soon as possible.

2.6 RESPONSE TO A MAJOR EARTHQUAKE- EXAMPLES

2.6.1 Field Command Post

If the City of Burbank is impacted by a major earthquake, personnel assigned will be confronted by a number of unusual problems and tasks. A few of the most noteworthy include the following:

Example #1: Electric and Water System Operations

Conductors, transformers, and poles on the ground will be vulnerable to scattered power outages and could cause damage

to human life and property. Many underground power structures and water facilities may be damaged. This could result in loss of power and loss of water pressure respectively.

PSD should anticipate a reduction in effective electric and water restoration capabilities. Depending upon the status of freeways and bridges, or due to other unknown reasons, many employees may be unable to report to worksites.

If the Pacific Direct Current Intertie (PDCI) or the Intermountain Power Plant (IPP) lines have been damaged, the PSD electrical system may lose its tie with Los Angeles. If this should occur, PSD may have to depend upon its own generation. On the other hand, an earthquake may cause serious damage to the Power Plant and Burbank may have to depend upon outside power.

The water system could lose its ties with the Metropolitan Water District (MWD). The water system may not be able to supply water for an extended period of time. The water supply may become undrinkable, contaminated, or uncontrolled leaks may bleed the system to low levels resulting in loss of pressure and supply capability. Loss of power may prevent tanks and reservoirs from being refilled. Leaks at reservoirs and tanks may interrupt water service.

Electric short circuits could cause fires; PCB spills may occur. Water leaks could also occur.

Example #2: Assistance in Rescue Operations

Besides being responsible for the restoration of the electric and water systems, PSD may be called upon to assist the Fire Department in heavy rescue operations. High rise buildings may present a particular problem because of their dependence upon power for operation of elevators and other support systems. PSD may be requested to assist the Fire Department in first aid or CPR if the need arises.

PSD should implement its emergency plans, and/or devise other quick solutions to the potential water shortage. PSD should devise and implement emergency procedures to provide power to critical facilities such as hospitals, water facilities, the police station, fire stations, shelters, the emergency broadcasting radio station KROQ, NBC, and other critical facilities.

Line Mechanics and other Electrical Division employees trained in rescue operations, as well as pipefitter operators and others trained in the use of skiploaders, cranes, and rescue

equipment, may be called upon to assist in rescue operations or debris clearance.

2.7 RESPONSE TO MAJOR STORMS AND FLOODING CHECKLISTS

2.7.1 Field Command Post

A. Prepare to relocate PSD equipment at risk from the PSD yard, if necessary.

B. Establish communication with the EOC. Determine if the EOC has been activated.

C. Review areas which, historically, have been problem areas for the City. These areas include but are not limited to:

1. County Club Drive
2. Underpass, Hollywood Way at Empire Avenue
3. Underpass, San Fernando Road at I-5 Freeway
4. Underpass, Hollywood Way at San Fernando Road
5. Underpass, Victory Place at railroad crossing
6. Landfill
7. Empire Avenue near Buena Vista Street
8. Griffith Park Drive and vicinity near the Lockheed channel
9. Joaquin Drive, between Haven Way and Irving Drive
10. Third Street, between Cypress Avenue and Verdugo Avenue
11. Olive-Lincoln #1 and Olive-Lincoln #2 69 kV lines, along with the Western Flood Control Channel Water reservoirs and pumping plants, specifically those located in the hill area

D. Assist in warnings and evacuations, especially in canyon areas such as Sunset and Paseo Redondo.

E. Assist in citywide flood mitigation activities, particularly those affecting electric and water facilities.

F. Establish communication with the EOC. If the EOC is not yet activated, establish communications with the Police Department, Fire Department, and Public Works Department.

G. Coordinate with the Hazardous Materials Specialist to ensure action is taken to prevent any hazardous waste release into the underground electric duct system, water sewage system, or storm drain system.

H. Log any time spent by PSD personnel in flood mitigation activities for reimbursement from the State or Federal Government should a disaster later be declared.

2.8 RESPONSE TO MAJOR STORMS AND FLOODING- EXAMPLES

In the event of a storm and/or flooding, a number of problems could arise requiring unique action. This could include the following examples:

Example #1 Flood Waters

Flood water entering the electrical underground vaults could cause electrical short circuit, fire, or a power outage. Flooding may also cause serious damage to electrical devices such as elbows, connectors, oil switches, submersible transformers, etc., causing premature failure. Flood waters may enter into the water system, making it undrinkable.

Example #2 Erosion

Erosion may jeopardize water pipes, causing disruption in supplies, or making supplies unsafe for drinking. Erosion caused by flooding can become a major threat to poles and overhead lines. It may cause a problem on the streetlighting system. Scattered power outages could be caused by tree branches being struck by downed power lines or gusty winds and heavy rain. If the nearby hills erode or subside, flooding and heavy rain may create problems with the numerous tanks and reservoirs located in the hill area.

Example #3 Mudslides/Flood Control Channels

Mudslides have the potential to do tremendous damage to overhead power lines in the hillside areas. Water pressures may be affected if water mains rupture or fire hydrants are broken off by debris flows. Flood control channels may become swollen with rainwater and become a threat to nearby overhead electrical facilities.

2.9 RESPONSE TO A CIVIL DISTURBANCE/WAR OR FOREIGN ATTACK

The Public Service Department checklist will be the same in case of civil disturbance, war, or foreign attack.

A. Establish communication with the EOC.

B. Gather all information available regarding the potential threat. Determine how the disturbance will affect the critical electric and water facilities. The PSD yard, the Power Plant, and the SCADA Center, are critical PSD

facilities. However, the tie with Los Angeles Department of Water and Power at the "RS-E", switching stations (Valley, Lincoln, and Olive), distributing stations (Alameda, Burbank, etc.), water reservoirs and pumping plants, and the water connection with the MWD, could all be potential targets. It would be difficult for the Police Department to safeguard every PSD facility.

C. Assist in ensuring the safety of the public and PSD employees on duty.

D. Be alert and ready to act when required or called upon.

E. If a bomb threat to any electrical and/or water facility is received, remain calm. Complete the bomb threat procedure as stated in Appendix L. Notify the Police Department.

F. Should any of the listed events occur, it is probable that the EOC would be activated. If you are requested to, report for work under the directions of the **Field Command Post** or EOC. If a curfew should be enforced within the City, City employees called for duty are exempt. If questioned by law enforcement personnel, show them the sticker on the back of your City Employee Badge.

2.10 RESPONSE TO A CIVIL DISTURBANCE/WAR OR FOREIGN ATTACK-EXAMPLES

In the event of a civil disturbance, riot, war, or foreign attack, PSD electric and water facilities may become a target of terrorist activity. A few of the problems encountered could include the following:

Example #1 Terrorism

Security of critical electrical and water facilities may be threatened by an act of terrorism. Such facilities include, but are not limited to, the PSD yard, the Power Plant, SCADA Center, Valley Switching Station, the tie to LADWP at "RS-E", switching stations, distributing stations, 34.5 kv customer stations, water reservoirs, water pumping plants, and the water interconnection to MWD.

Maintenance of service (electric and water) could be a problem because of a threat to the lives of PSD employees. Until the security of their lives can be ensured, this would mean possible delay in restoration of services. Both electric and water emergency shut-downs may be needed. Damage caused to

the electric system may be so severe that the service in a part of the city, or the entire city, may have to be reduced.

Fear of poison, or other method of making the water undrinkable, may make the quality of drinking water uncertain.

A bomb threat to PSD buildings is possible. Response to such a situation will be coordinated with the Police Department. See Appendix L for a sample Bomb Threat Call Check List developed by the Burbank Police Department.

2.11 RESPONSE TO SYSTEM EMERGENCIES (POWER OUTAGE OR MAJOR WATER LEAK) FROM OTHER CAUSES

There are numerous situations in which part, or the entire, electrical and water systems could be lost. If all else appears normal, and the problem is limited to either electric or water, the EOC may still activated. The General Manager, or his designee, will act as Disaster Manager and will report to the Command/Policy Group at the EOC.

2.12 RESPONSE TO SYSTEM EMERGENCIES CHECKLISTS

2.12.1 Field Command Post

A. Activate the **Field Command Post.** Establish communications with the EOC.

B. Make certain that communications between the SCADA Center, Power Plant, and LADWP are intact.

C. Dispatch field crews at the instructions of the EOC Operations Section.

D. If the EOC is not activated, establish communications with the SCADA Center, and the Water Operations Section. Evaluate the extent of the outage and its affect on other related services, such as traffic signals, water service to critical facilities, etc.

E. If the EOC is activated, SCADA Center personnel, who are mainly responsible for the restoration of the electric system, will coordinate the response with the Operations Section of the EOC.

F. Similarly, Water Operations personnel will be responsible for handling major water leaks, and will coordinate the response to EOC through the **Field Command Post.**

G. Assess the damage caused to electrical equipment in the stations, as well as in the field.

H. Follow the Damage Assessment Checklist as per the Priority Checklist previously established (see attached Priority Checklists).

I. Determine the status of PSD apparatus. Establish availability and deployment lists.

J. Assist the SCADA Center, or Water Operations Section.

2.12.2 EOC

A. Manage the overall system emergency. Prioritize decision making, coordinating, tasking, and resolving conflicts within the EOC.

B. Develop emergency policies.

C. Report to the Director of Emergency Services. Inform the Director regarding the status of the electric and water systems.

D. Coordinate with other jurisdictions and agencies.

E. Assess damages. Gather all information available, verifications, and reports from the **Field Command Post**.

F. Direct all field operations.

G. The PSD General Manager will act as Disaster Manager, if a power or water outage is the only emergency.

2.12.3 SCADA CENTER

EMERGENCY SYSTEM RESTORATION PROCEDURE

There are three possible causes of a system-wide outage. These causes and recommended operating practices for system restoration are detailed in the three sections listed below.

Section I — Loss of the tie to Los Angeles Department of Water and Power (LADWP) at RS-E, due to either an uncleared fault on the LADWP system or on the Toluca-Valley 69 kV lines.

Section II — Loss of a critical line(s), transformer bank(s), an uncleared fault on the internal Burbank 69 kV or 34.5 kV system, or loss of an on-site generating unit(s).

Section III — A natural disaster such as a severe earthquake, major storm with flooding, urban/interface fire, etc.

Note: Orange Channel-3 is dedicated for radio communication between the Power Plant and SCADA Center. Orange Channel-2 is for radio communication with other electric sections. In an emergency, both Orange Channel-2 and Orange-3 should be listened to and used for communication.

SECTION I

Loss of the Tie to Los Angeles Department of Water and Power (LADWP) at RS-E, Due to Either an Uncleared Fault on the LADWP System or on the Toluca-Valley 69 kV Lines

Note: This restoration procedure should be used by the dispatcher as a guideline to restore the system following a disturbance; it is not a rigid step-by-step procedure. Because every situation is unique, the procedure cannot include every circumstance.

A. While the system is operating normally, be prepared for an emergency:

Be constantly aware of:

- system frequency
- system load
- on-site generation and unit availability
- RS-E tie loading (import)
- load that can be shed by automatic underfrequency relays
- loading on major 69 kV and 34.5 kV lines
- bus voltage at Valley, Lincoln, Olive, and Burbank Switching Stations

- low-side bus voltage levels at Hollywood Way, Naomi, Town, San Jose, and McCambridge Distributing Stations
- MVAR resources available

B. When the tie with LADWP is interrupted, use the following checklist as a guideline:

1. Determine status of the system.

   a. System voltage and frequency.
   b. Where is the tie open?
   c. What generation is still available?
   d. Was any load lost, and, if so, where?
   e. What other lines have been tripped and where?
   f. What is the loading on the available lines?
   g. Is there low voltage anywhere?

2. Inform the Power Plant (by phone or radio) of the system status immediately. Use Orange Channel-3 for radio communication with the Power Plant.

3. In order to stabilize the system frequency, proceed with manual load shedding. Open the low side transformer breakers to shed the load. If necessary, deviate from the manual load shedding sequence as stated below. Adjust on-site generation, if necessary. Power Plant Shift Supervisors and Operators are instructed to keep the units on-line if possible unless the system frequency drops below 58 HZ. If it remains there for more than one minute, take the units off-line as quickly as possible. Unload the overloaded facilities by changing generation levels, import, or dropping load. Refer to the flow chart (Arresting Frequency Decline Following Separation From LADWP) included at the end of this section.

   To stabilize the system voltage, open or close the Lincoln 69 kV and Valley 34.5 kV capacitor banks, or raise or lower the steps on the Valley regulators and LTCs, the Power Plant can adjust the generator or synchronous condenser VAR output. Keep the Power Plant informed of system status at all times.

4. Determine the cause of the outage.

   a. What is the status of the neighboring systems?

   b. If the power outage is caused due to some fault on the Toluca-Valley lines or the WSCC system through Los Angeles, other City services will not usually be affected.

   c. Follow the remaining procedure to restore the system back to normal.

5. Contact switchmen to report to duty as required. If possible, dispatchers living within a ten mile area should automatically report to work. Inform all necessary personnel regarding the system disturbance.

Note: Patience and calmness are essential to taking the correct steps during and after any system disturbance.

C. Restoration Phase

Establish communications with the LADWP Dispatcher at the ECC. As soon as the cause of the outage has been determined and system frequency and voltage is stabilized, proceed with the restoration phase.

1. Contact the LADWP dispatcher at the ECC to determine if there is any physical damage to the 69 kV tie lines at the RS-E end. Instruct switchmen to determine if there is any obvious physical damage to the tie line positions at Valley Switching Station.

2. Instruct the Line Section to patrol the Toluca-Valley lines. Do not consider restoring those lines until the Line Section has reported their condition. If no damage is reported on any of the three lines, proceed with restoration of these lines. If any of the three lines has physical damage, either in the station or in the field, first isolate that line on both ends, and then proceed with the restoration of the remaining lines.

3. If necessary, utilize any equipment out for maintenance which can be brought into service. Determine whether there is adequate personnel to assist in the restoration.

4. Contact the LADWP dispatcher at the ECC to determine the following:

   a. Is the LADWP system stable and in a position to be synchronized with the Burbank system? Schedule any needed transfers, and make any realtime changes needed to meet the system load.

   b. If both ends of the lines are open, determine which end should be closed first. Determine whether the synchronizing point will be at RS-E or Valley Switching Station. Because LADWP has instrumentation at RS-E to measure any phase angle difference between the two systems which are not available at Valley, it is preferable to synchronize at RS-E. Inform the LADWP before closing in at Valley.

c. After the tie is closed, monitor tie power flow and Valley voltage.

d. Is any additional on-site generation required to adjust tie line loading?

   i. Can the output of online generating units be increased?

   ii. If not, start and bring online one or more combustion turbine.

e. If the Toluca-Valley lines can handle more import:

   i. Ask LADWP if they can provide additional purchased power under the provisions of the Southern California Utilities Power Pool (SCUPP).

f. If it has been determined that Burbank personnel alone cannot make the repairs necessary to restore the system, request assistance from LADWP, Glendale, and Pasadena under the provisions of the SCUPP Emergency Assistance Procedure.

5. The top priority is to provide startup power from RSE or combustion turbines for any units which tripped off or had to be taken off-line. If the on-site units are still on-line, and there is no problem in restoring the Toluca-Valley lines proceed with the complete restoration of the remaining 69 kV network (Lincoln-Valley, Olive-Valley, Olive-Lincoln Nos. 1 and 2 69 kV lines). If one or more 69 kV line cannot be restored to normal service, determine the effect of that outage on the remaining 69 kV lines. If it will not cause any overloading or voltage problems, then proceed restoring the remaining 69 kV network.

   Note: Work with on-duty Power Plant personnel to keep the on-site units on-line without exposing them to excessive underfrequency conditions as noted above. If the units had to be taken off-line, and the power plant auxiliaries have no power, the first priority should be to provide power for the power plant auxiliaries. (Note that a 275 kW standby generator has been installed at the Olive Power Plant.) If the tie with Los Angeles cannot be restored, then proceed with the blackstart procedure.

6. After the 69 kV network has been restored to normal service, proceed with restoration of the 34.5 kV network system. If the fault occurred on the LADWP system or one

of the Toluca-Valley 69 kV lines, the 34.5 kV network will likely be intact. If the 34.5 kV network is not intact, restore any lines that tripped to normal service.

7. The final level of restoration is the restoration of the distribution system. Begin with the 12.47 kV distributing stations in the following order:

   a. San Jose
   b. Hollywood Way
   c. Golden State

   Keep the LTCs in neutral and in the off position at first, if necessary. Begin with critical patient feeders for each station and restore one feeder at a time. Complete load restoration at each station before beginning the next. Then put the LTCs in the automatic mode after the entire station load is restored.

8. Proceed with the restoration of the 4.33 kV feeders. Restore them in the following order by Distributing Station:

   a. Naomi
   b. Pacific
   c. Clybourn
   d. Burbank
   e. Flower
   f. Winona
   g. Town
   h. Victory
   i. Alameda
   j. McCambridge

   Open capacitor banks in the stations first if they were not previously open. Then restore the station load by closing one feeder at a time and start with critical patient feeders.

   * Steps 7 and 8 assumes that enough generation is available to serve the load. If generation is not sufficient to meet the load then use the priority list of critical circuits as outlined in Appendix "O"

9. Monitor the following:

   a. System load
   b. System frequency and voltage
   c. Loading on each line and bank
   d. Low-side bus voltage at each station
   e. VAR interchange with LADWP

f. Depending upon station bus voltage, close the station capacitor bank, or put the LTCs in the automatic mode, after all its feeders have been restored.

Close the Lincoln 69 kV and Valley 34.5 kV capacitor banks as needed, and raise or lower the 69 kV regulator steps at Valley Switching Station, to bring VAR interchange with LADWP to the normal range, if possible, and bus voltages at each station to within the prescribed limits. Temporary MVAR interchange of up to 60 MVARS, in/out, is permissible.

10. Restore on-site generation and scheduled import to prior levels as soon as practicable. Reduce VAR interchange to normal levels as soon as practicable. If VAR interchange requirements cannot then be maintained, inform the LADWP dispatcher.

11. Notify the WSCC and the NERC regarding the outage on the required form within 24 working hours.

Note: At this time, Burbank has only one tie point to other utilities (LADWP at RS-E). As the former Toluca-Western 69 kV lines are incorporated into the 69 kV system, this procedure will be modified as required.

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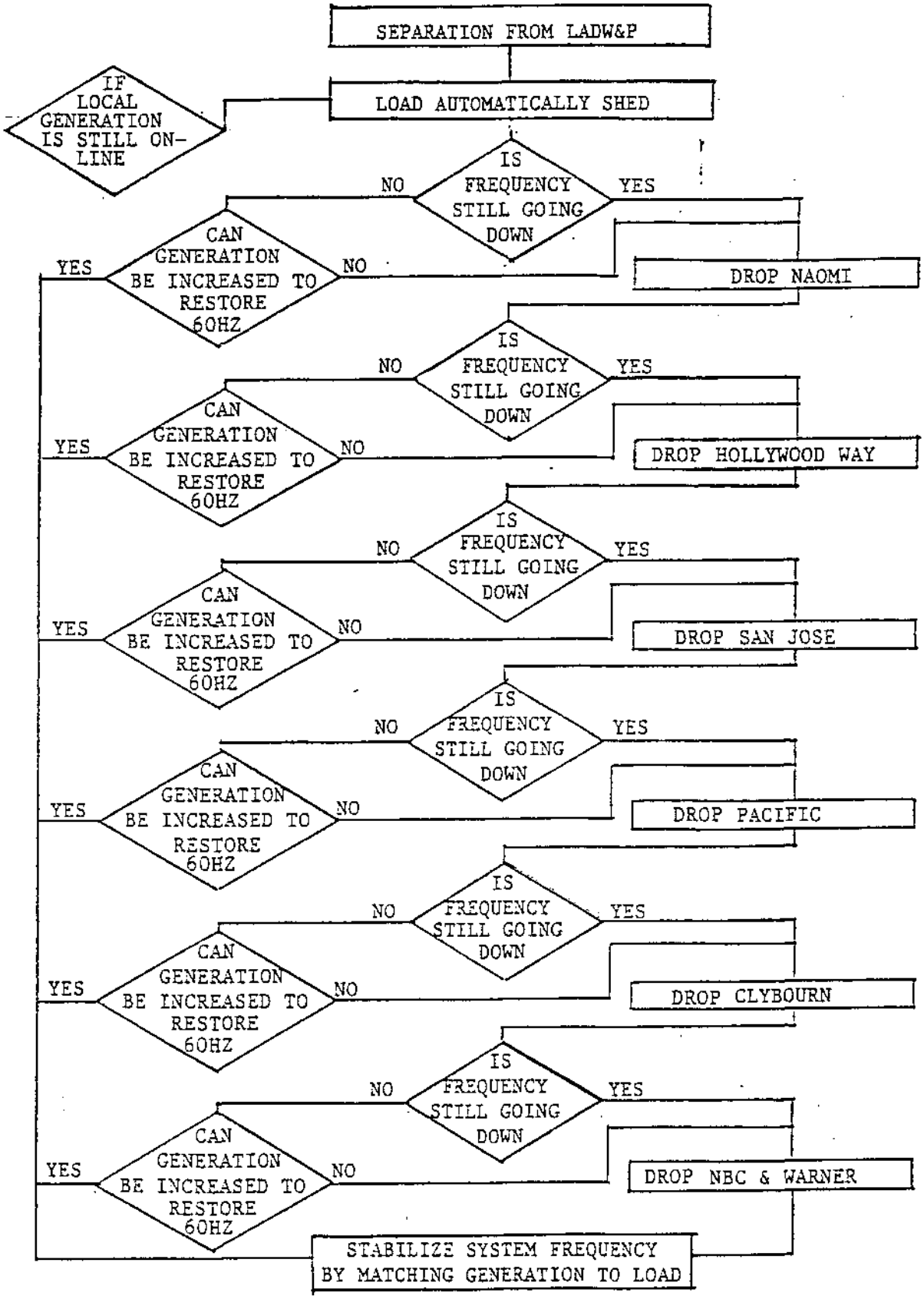
ARRESTING FREQUENCY DECLINE FOLLOWING SEPARATION FROM LADW&P



No.	Revisions	By	Check	Appv'd	Date

Drawn PL | Scale None | Check PL | Appv'd DDB | Date 7-27-95

CITY OF BURBANK
PUBLIC SERVICE DEPARTMENT

Drawing No.

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SYSTEM RESTORATION PROCEDURE

SECTION II

Loss of Critical Line(s), Transformer Bank(s), an Uncleared Fault on the Internal Burbank 69 kV or 34.5 kV System, or Loss of an On-Site Generating Unit(s).

This procedure can be used as a guideline by the dispatcher in restoring the system.

A. While the system is operating normally, be prepared for an emergency:

Be constantly aware of:

- system load
- on-site generation and unit availability
- RS-E tie loading (import)
- MVAR resources available
- loading on major 69 kV Lines and 34.5 kV lines
- load to be shed by automatic underfrequency relays
- bus voltage at Valley, Lincoln, Olive, and Burbank Switching Stations
- low-side bus voltage levels at Hollywood Way, Naomi, Town, San Jose, and McCambridge Distributing Stations

B. After the Disturbance

1. Determine status of the system.

   a. System voltage and frequency?
   b. Have any of the Toluca-Valley lines tripped?
   c. Are generating units still available?
   d. What 69 kV and 34.5 kV lines are out?
   e. Was any load lost and where was it lost?
   f. Are there overloads on any line or transformer?
   g. Is there low voltage anywhere?

2. Inform the Power Plant Operator (by phone or radio) of the system status immediately. Use Orange Channel-3 for radio communication with Power Plant. If necessary to relieve overloads, work with Power Plant Personnel on duty to temporarily proceed with raising or lowering of on-site generation.

3. Check the system voltage profile, and, if not within normal limits (i.e., between 95% to 105%), adjust it by first changing the step on the Valley 69 kV regulators. Then open or close the Lincoln 69 kV and/or Valley 34.5 kV capacitor banks, raise MVAR output on the on-line generating units, or request the Power Plant Operator to put the Olive No. 4 unit on-line in synchronous condenser mode, if it is not already on-line for peaking use.

4. Determine the cause of the outage. Be prepared to restore the remaining system back to normal service. Contact switchmen to report to duty as required. If the outage involves several lines, dispatchers living within a ten mile area should report to work. Inform all supervisors and personnel on the computer list regarding the system disturbance.

   If the outage was caused by a natural disaster, follow the procedure as outlined in Section III. Otherwise, be prepared to restore the remaining system back to normal service.

   Note: Patience and calmness are essential to taking the correct steps after any system disturbance.

C. Restoration Phase

As soon as any overloads have been relieved and the system voltage is within normal limits, proceed with the restoration phase.

1. Isolate the area of disturbance.

2. Determine the sequence required to restore the system. If the tie with RS-E is intact, inform the LADWP dispatcher at the ECC of the situation and that the import will be restored to previously scheduled levels as soon as possible. Contact the Power Plant operator on duty to raise or lower on-site generation if needed. Every line and bank involved in the outage must be patrolled and inspected before being reenergized.

3. If the Toluca-Valley and Lincoln-Valley 69 kV lines and one of the Olive-Lincoln lines, or one of the Burbank-Olive ties, are not affected by the outage, do not put top priority on restoring the 69 kV system. If, however, any Toluca-Valley lines are out of service for any reason, they should be patrolled, inspected and, if possible, restored to normal service as soon as possible. The next priority is to restore 34.5 kV service to any distributing or customer station that is out of service.

   a. Restore service to a station(s) by first energizing one 34.5 kV line feeding each station(s) affected by this outage.

   b. Restore service to customers by reenergizing one feeder at a time.

c. Begin with the critical patient feeders at each station.

4. If no load has been lost, restore any 34.5 kV lines or banks to service once they have been patrolled, inspected, and found to be in good condition.

5. Proceed to restore to normal service any remaining 69 kV lines determined to be undamaged to normal service.

6. During the restoration process, make sure that system voltage, MVAR interchange, and line loading remain within normal limits. Temporary MVAR interchange up to 60 MVARS in/out is permissible.

   Top priority is to restore load first, if it can be done without overloading any part of the system and without compromising system integrity or reliability.

7. If possible, restore generation and scheduled import to previous levels after system restoration has been completed.

Many scenarios are possible. Experience, judgment, and common sense will indicate what should be done in a specific situation.

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SYSTEM RESTORATION PROCEDURE

SECTION III

A Natural Disaster such as a Severe Earthquake, Major Storm with Flooding, Urban/Interface Fire, Etc.

This procedure can be used as a guideline by the dispatcher in restoring the system.

A. While the system is operating normally, be prepared for an emergency:

Be constantly aware of:

- system frequency
- system load
- on-site generation and unit availability
- RS-E tie loading (import)
- load that can be shed by automatic underfrequency relays
- loading on major 69 kV lines and 34.5 kV lines
- bus voltage at Valley, Lincoln, Olive, and Burbank Switching Stations
- low-side bus voltage levels at Hollywood Way, Naomi, Town, San Jose, and McCambridge Distributing Stations
- MVAR resources available

B. During the Disturbance

The following checklist may be used as a guideline in the event of a system emergency:

1. Determine status of the system.

   a. System voltage and frequency?
   b. Has Burbank separated from LADWP?
   c. Where is the tie open?
   d. What generation is still available?
   e. Was any load lost and where was it lost?
   f. What other lines have been tripped and where were they tripped?
   g. What is the loading on the available lines?
   h. Is there low voltage anywhere?

2. Inform the Power Plant (by phone or radio) of the system status immediately. Use Orange Channel-3 for radio communication with the Power Plant.

3. Stabilize the system frequency by adjusting generation or by manual load shedding, if needed. Power Plant shift supervisors and operators are instructed to keep the units on-line unless the system frequency drops below 58 Hz and remains there for more than one minute. If that occurs then immediately take units

off-line as quickly as possible.

4. Stabilize the system voltage by raising or lowering steps on the Valley regulators, or by opening or closing the Valley and/or Lincoln capacitor banks. Request the Power Plant to adjust the generator or synchronous condenser VAR output. Keep the Power Plant informed of the system status at all times.

5. Determine the status of the neighboring system (LADWP). Establish communication with LADWP dispatchers at the ECC.

6. Contact the Power System Superintendent, the Senior Electrical Engineer in charge of the SCADA Center, the Power System Manager, the General Manager, the Electrical Services Manager, and other persons on the list who are to be informed. Determine if the EOC has been activated. If the EOC has been activated, establish communication with the EOC (phone number: 238-1515).

7. If possible, after making sure that family and property are safe, dispatchers living within a ten mile radius should report to work.

Note: Patience and calmness are essential to taking the correct steps during and after any system disturbance.

C. Restoration Phase

1. Assess the available generation and estimated peak load and determine if the whole system can be restored or if only partial restoration is possible and convey that to the EOC. Do not restore any load without instructions from EOC if activated. After the system frequency and voltage is stabilized and switchpersons are available, follow instructions and priorities set by the EOC.

If the EOC is not yet activated, dispatch the switchpersons to gather information regarding the status of, and any physical damage to, the switching, distributing, and customer stations. Follow the predetermined priority until the EOC is activated and ready to provide direction. Use the predetermined blank form for damage assessment. See the Emergency Action Plan for further information and sample Damage Assessment forms.

a. First Priority

- Tie with LADWP "RS-E" to Valley Switching Station
- Olive Generating Unit Nos. 1, 2, 3, and 4
- Magnolia Generating Units Nos. 3, 4, and 5
- Valley Switching Station
- Olive Switching Station
- Lincoln Switching Station
- 69 kV lines within the City (Lincoln-Valley, Olive-Valley and Olive-Lincoln #1 and #2)
- Toluca-Olive-North 69 kV line (the normally open line, if in service)

Restore the 69 kV network under the direction of the EOC.

b. Second Priority

The 34.5 kV subtransmission system with at least one line to distributing/customer stations providing service to hospitals, emergency broadcasting station KROQ, NBC, emergency shelters, and other critical loads (such as the airport and critical water/sewer facilities). The EOC will provide priority. However, if manpower is available before the EOC is ready to provide instructions, proceed with damage and physical damage assessments to the distributing stations. Use the following priority list:

- San Jose
- Hollywood Way
- Golden State
- Naomi
- NBC
- Warner
- Pacific
- Clybourn
- Burbank
- Flower
- Winona
- Town
- Victory
- Alameda
- McCambridge
- remaining customer stations

Gather all the information required and prepare to restore the service when called upon. Do not close any line unless the Field Command Post has reported its condition to the EOC and the EOC has directed you to do so.

Initially, distributing and customer stations (34.5 kV/4.33 kV or 12.47 kV side), and service to hospitals, critical patient feeders, KROQ radio station, NBC, and emergency shelters should be energized by one 34.5 kV line under the direction of the EOC. In the absence of EOC activation, consult with the Field Command Post regarding any work on the 12.47 kV or 4.33 kV distribution lines serving critical facilities, such as hospitals, radio stations, airport, etc.

Note: Refer to Priority List of Critical Circuits Annex "O", in case of a disaster, for more details.

c. Third Priority

- feeders with critical care patients
- 12.47 kV feeders serving high-rise buildings and the Media City Center Mall
- remaining distribution line work under the direction of the EOC

d. Fourth Priority

- anything not covered above.

Use the blank forms provided for damage assessment. Keep track of the time spent on assessments. Refer to the PSD Emergency Action Plan for more details.

2. Refer to the Public Service Department Emergency Action Plan for further details regarding restoration phase priorities.

NOTE:

1. This priority list is a guideline and changes in priority may occur depending upon the nature and location of damage done due to a natural disaster.

2. SCADA Center personnel will report directly to the Operations Section of the EOC, and will work with the **Field Command Post** or other sections as needed. The following check list is a guideline for a system emergency:

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Section 2.12.4

POWER PLANT

Response to Major Power Outages

There are three types of power outages for the Power Plant to contend with. They are:

-loss of local generation unit(s);

-separation from the Los Angeles Department of Water and Power and;

-an uncleared fault on the Burbank system representing any major portion of the load.

Because these losses can be caused by innumerable conditions, no one emergency response plan can encompass all possible occurrences. The actual response procedures should depend upon the nature and magnitude of the disaster. This action plan should be used for guidance and not a rigid step-by-step procedure. This response plan deals primarily with the restart procedures after a complete power system outage.

PRIORITIES

1. Safety of personnel
2. Protection of plant equipment
3. A safe restart of plant equipment.

SAFETY OF PERSONNEL

1. It may be necessary to evacuate the plant. If this is so, follow evacuation plans as outlined in the PSD Emergency Action Plan. The safety of personnel should be the primary concern.

2. Communications should be established with the personnel between the Magnolia and Olive plants to secure help to.

   a) assist in rescue of on-site personnel
   b) secure the plant.

3. Communications with SCADA Center is critical and should be established as soon as is feasible via telephone or radio (Orange Channel #3) to determine the likelihood of reconnection to LADWP and to inform the SCADA Center of the Plant's status.

PROTECTION OF PLANT EQUIPMENT

If conditions allow, all plant systems should be stabilized and rendered safe. If the system frequency drops below 58 HZ and remain there more than one minute than take units off-line as quickly as possible. Assure that all fuel valves are secured and begin turbine roll down procedures. A brief overview of **station shut-down priorities** defined by plant is outlined in **Appendix A-1**. In addition the following items should be attended to:

1. After an outage has occurred, the following information must be determined:

   a) Was there a loss of on-site generation?
   b) Was there a separation from LADWP?
   c) Was loss of power due to wide spread natural disaster, (i.e. earthquake, flood or fire) or a local occurrence (i.e., ground fault)?
   d) Can power be restored to receiving Station E? If so, how soon?
   e) Is a restart possible?
   f) Should black start procedures be implemented?

2. If the SCADA Center indicates that receiving Station E will not be immediately restored and requests the combustion turbines be started, make preparations for a black start of the combustion turbine generators. When the combustion turbines are the sole source of local power their priority usage should be to provide:

   a) auxiliary power to prevent major Plant equipment damage,
   b) Auxiliary power to restart equipment,
   c) local City power - refer to recommended priority list of critical circuits Appendix "O"

   Black start procedures for the Combustion Turbines should be initiated. Black Start Procedures are available in the Operating Manual under the Gas Turbine section, orders #067 and #068. (see **Appendix B-1**). Olive #4, Olive #3, and Magnolia #5 are capable of black start. The priority is normally as follows: Magnolia #5, Olive #3, Olive #4, but should be decided by the shift supervisor.

3. If combustion turbine generators are unavailable make preparations for a black start of the diesel generator.

   Combustion Turbines are unavailable. Before roll down of turbines is completed power supply switching for **Emergency Diesel Generator Operation** and the Diesel black start should be completed (see attached switching diagram and diesel operation prccedures, **Appendix C-1**).

4. During turbine roll down:

a) Make checks on lube oil supply. Assure that auxiliary DC oil pumps have started.
b) Attend to turbine drains.
c) Check hydrogen pressure on the generator.
d) Ensure there is hydrogen pressure on the generator.

5. Control room operators should attend to boiler boards.

a) If it is determined that there is no auxiliary power available, boiler board controls should be switched to the off or green light position.

6. Coordinate with dispatchers at the SCADA Center to complete the switching necessary in the Olive and Magnolia switchyards to allow for black start completion.

a) It may be necessary to tie the Magnolia and Olive switchyards together before a black start is initiated. This will allow only one gas turbine to provide auxiliary power. The first unit on line would be used for frequency control.

7. If a second gas turbine is needed:

a) It must be started in the parallel position.
b) If one gas turbine is running at Magnolia and one at Olive and systems are separated, frequency will be controlled in hand, (Isolated position). If systems are eventually tied together, one frequency control may be placed in the parallel position. Have an operator available in the control house at all times to keep frequency steady, unless Gas Turbine Generators are in the Auto position.

8. After black start is completed a re-start of steam units may proceed if plant conditions allow.

a) Air pressure should be established. Start appropriate air compressors.
b) Check boiler water drum level. If a water level is visible in the boiler gauge glass, a re-start may continue.
c) If level is out of sight low, the boiler should be bottled up until the Power Production Superintendent is notified and an assessment can be made. If the Superintendent is unavailable, the Shift Supervisor on duty shall make the assessment.
d) It may be possible to utilize the hot water in the D.A. tanks to attempt a refill of the boilers. This is a limited action because of the limited availability of the stored water, and it may not be enough to get a visible level in the boiler gauge glass.

e) The water should be trickle fed to the boiler using the feed water stop by-pass, to keep from slugging the boiler with the relatively cold water.

f) If this is attempted on the Olive #2 boiler, it is imperative that the water be as hot as possible and that care is taken not to shock the economizer. It must be given maximum protection. This may be accomplished by utilizing the residual heat from the boiler and by starting the fans, and trickle feeding the boiler.

g) Start the forced draft fan and establish an air flow of approximately 5% to 15%, don't get the air flow too high as this will have a cooling effect on the economizer.

h) Begin trickle feeding the economizer using the economizer stop valve by-pass.

i) Keep an eye on the feed water temperature and the D.A. level. Do Not allow D.A. level to get too low, as a reduction in suction pressure to the feed pump may cause the feed water to flash in the feed pump. (We were able to bring the level down to the D.A. low level alarm on 1-17-94 after a major earthquake, with no ill effects to the boiler or the Feed Pump.)

9. Once boilers are up to pressure, at least 400# at the Magnolia Plant and 600# at the Olive Plant, turbines can be rolled.

a) Ensure that proper dry out and warm up schedules are utilized. This will be at the discretion of the Power Production Superintendent or the Shift Supervisor in charge.

b) If the unit being brought up, was on the line prior to the outage, it may be more advantageous to bring the unit up more quickly than usual, as it will already be hot. If this is the case, before loading the unit ensure that enough expansion has taken place in the casings and rotors to allow for this loading.

c) It is better to have partial load on the Generators and come up slowly than to try to rush the process and damage a unit. The Shift Supervisor shall exercise discretion in determining how fast a unit will be made available for full generation.

d) Providing energy to critical facilities will have priority over system normalization. It may therefore take some time before the Burbank power system is back in a normal operating mode.

10. Varied problems may prevent restarting generating units and restoration of the power system. They may include:

a) A rupture of the utility air. The BMS (Burner Management System) requires a minimum of 60 psi air pressure for operation of the burner fuel valves.

b) Loss of the 30#/40# instrument air. Instrument air is required for all control in the plant.

c) Loss of or interruption of demineralized water for system make-up.
d) Loss of the Burbank or the Magnolia switchyards.
e) Deterioration of station batteries due to excessive running of DC equipment.

11. The greatest hindrance to a successful restart is the over-taxing of the crews that are present when the disaster occurs.

a) Off personnel are instructed to report to work as soon as is possible.
b) It may be necessary to instruct some of the off personnel to stay home to help provide for relief later on. It is the responsibility of the off personnel to call in or to report to work as soon as practical.
c) It is desirable that all Power Plant operators work in twelve hour shifts. In special circumstances and under conditions where relief is not feasible after twelve hours, the operators may have to work up to a maximum of 16 hours subject to applicable State and Federal laws.

APPENDIX A-1

OLIVE PLANT PRIORITIES

On Loss of Auxiliary Power

#1 Outside Operator

1. Secure Olive 1 air ejectors.
2. Assure fuel valve has closed on Olive 1.
3. Roll Olive 1 turbine back 20 turns. Assure DC lube oil pumps are on and turbine is tripped.
4. Put auxiliary steam to Olive 2 seals. Secure at 0 vacuum. Assure turbine has tripped.
5. Assure fuel valve is closed on Olive 2.
6. Open hot reheat drain. De-pressurize re-heater.
7. Assure air preheater air motors are off. Return to control room.

#2 Outside Operator

1. Secure M.G. set.
2. Secure make-up and reject. Secure lube oil purifiers.
3. Open hotwell high level protection valves.
4. Secure gas cocks on both boilers. Open gas vents. Return to control room.

Inside Operator

1. Open all breakers on boiler boards.
2. Monitor boiler drum levels.3
3. When vacuum reaches 0 inform outside operator to secure auxiliary steam to seals.

Shift Supervisor

1. Open generator OCB's and house ACB's.
2. Open exciter breakers and zero out voltage.
3. Use emergency radio to contact SCADA Center.
4. Prepare for restart as indicated by SCADA.

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MAGNOLIA PLANT PRIORITIES

AFTER BUMP

Inside Operator

1. Make sure all normal machinery is running.

#1 Outside Operator

1. Check purifiers
2. Check fuel oil recirculation
3. Check all auxiliary equipment and general plant.

#2 Outside Operator

1. Check Turbines
2. Check battery charger

MAJOR CASUALTY WITH LOSS OF AUXILIARY POWER

Inside Operator

1. Check that BMS on both units has tripped.
2. Open #3 superheater vent 1/2 turn.
3. Open #4 superheater vent 1/2 turn.
4. Put boiler boards in hand and establish natural draft through boilers.
5. Secure gas shut-off on #3 and #4 boiler.
6. Monitor water levels in both boilers.
7. Open breakers for all machinery on control room boards.
8. Secure all manual burner valves.
9. When auxiliaries are restored begin purge on boilers.
10. Keep notes for log.

Note: If instrument air drops far enough, feedwater valves lock in place.

#1 Outside Operator

1. Secure oil to purifies.
2. Secure air ejectors including primary inlet.
3. Secure make-up to condenser hotwells.
4. Line up city water to air compressors.
5. Line up #4 cooling water return tank to floor.
6. When auxiliaries are restored start all available air compressors.

#2 Outside Operator

1. Roll turbine back 10 turns
2. Assure turbines have tripped.
3. Make sure steam driven lube oil pumps have started.

4. Do not break vacuum until it is determined that the unit will not be put back on.
5. If vacuum is broken secure gland steam and steam driven lube oil pump at zero vacuum.
6. When auxiliaries are restored put turbines on turning gear.
7. Check battery charger.

LOSS OF 34.5 KV BUS OR OVERLOAD DUE TO SEPARATION;

Burbank Sub-station Operator;

1. Open OCB's for #3 and #4 generators.
2. Lower voltage and open exciter field breakers.
3. When potential lights are restored on the 34.5 kV and 4 kV buses, close low side B-3 breaker.
4. Make sure B-2 bank is lined up.
5. Close low side B-4 and open tie breaker on #3 2500V bus.

APPENDIX B-1

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POWER PLANT OPERATING ORDER - Revised April 21, 1989

Breaker Locations & Positions Before Initiating a Black Start

Procedure Olive Unit No. 3 Sheet No. 3A or 4A

BREAKERS OPERATED FROM OLIVE CONTROL ROOM

Breaker No.	Breaker	Operation	Position
152-102	House Transformer ACB Unit #1	Man	Open
152-103	Start up Transformer ACB Unit #1	Man	Open
152-203	Start up Transformer ACB Unit #2	Man	Open
152-202	House Transformer ACB Unit #2	Man	Open
152-101	L.C. Transformer 1-1 ACB Unit #1	Man	Open
152-110	Unit 3 & 4 2500 V Buss Breaker	Man	Closed

Breaker No.	Breaker	Operation	Position
152-111	L.C. 1-2 Transfer ACB Unit 1	Man	Closed
152-201	L.C. 2-1 Transfer ACB Unit 2	Man	Closed
152-211	L.C. 2-2 Transfer ACB Unit 2	Man	Open
452-2	Unit 1 Generator OCB	Man	Open
452-5	Start up Transformer OCB	Man	Closed
452-10	Unit 2 Generator OCB	Man	Open
52-137	2500V Room Normal Feed Olive #4 Auxiliary Breaker	Man	Closed
52-218	2500V Room Normal Feed Olive #3 auxiliary breaker	Man	Closed
BREAKERS IN GAS TURBINE HOUSE			
152-301	#3 unit gas compressor breaker	Auto	Open
152-303	#4 unit gas compressor breaker	Auto	Open
152-304	#4 Water Injection pump breaker	Auto	Open
52-301	Main Breaker L.C. 1-2 to L.C. 4-1	Man	Closed
52-302	Main Breaker L.C. 2-1 to L.C. 3-2	Man	Closed
52-309	#4 unit auxiliary breaker		Closed
52-303	Tie breaker for unit 3 & 4 auxiliaries	Man	Open
52-305	#3 unit auxiliary breaker	Man	Closed
252-30	#3 unit generator breaker	A/M	Open
252-301	#4 unit generator breaker	Auto or	Open
BREAKERS IN SWITCH YARD			
452-3	Operated by Dispatchers		Open
452-7	Operated by Dispatchers		Open
452-12	Operated by Dispatchers		Open
452-14	Seq. operated or by Dispatcher		Open
452-6N	Operated by Dispatchers		Closed
452-11N	Operated by Dispatchers		Closed
452-1	Operated by Dispatchers		Open
452-45	Operated by Dispatchers		Open
452-8	Operated by Dispatchers		Open

POWER PLANT OPERATING ORDER - Revised April 17, 1989

Black Start Magnolia No.5

Should the need arise to Black Start Magnolia No. 5, utilize the following procedure:

It should be recognized that a loss of all electrical power would be a very serious occurrence. If this condition occurred, our primary concern would be placing the steam units in a safe condition. Some items requiring immediate attention would be:

A. Verify fuel (oil & gas) is shut off to boilers.

B. Verify DC and/or steam driven oil pumps are running.

C. Make-up and reject valves closed.

You are aware we would be without turbine turning gear capability, therefore, proceeding with the Black Start Procedure should be expedited. The following information is to assist you in expediting this event:

1. Strip boiler boards.

2. Field breaker open.

3. Position breakers to agree with Sheet 5A.

4. Verify breaker positions in Switchyard with SCADA Center. Dispatchers can satisfy all requirements in the Switchyard from the SCADA Center, in 1 or 2 minutes.

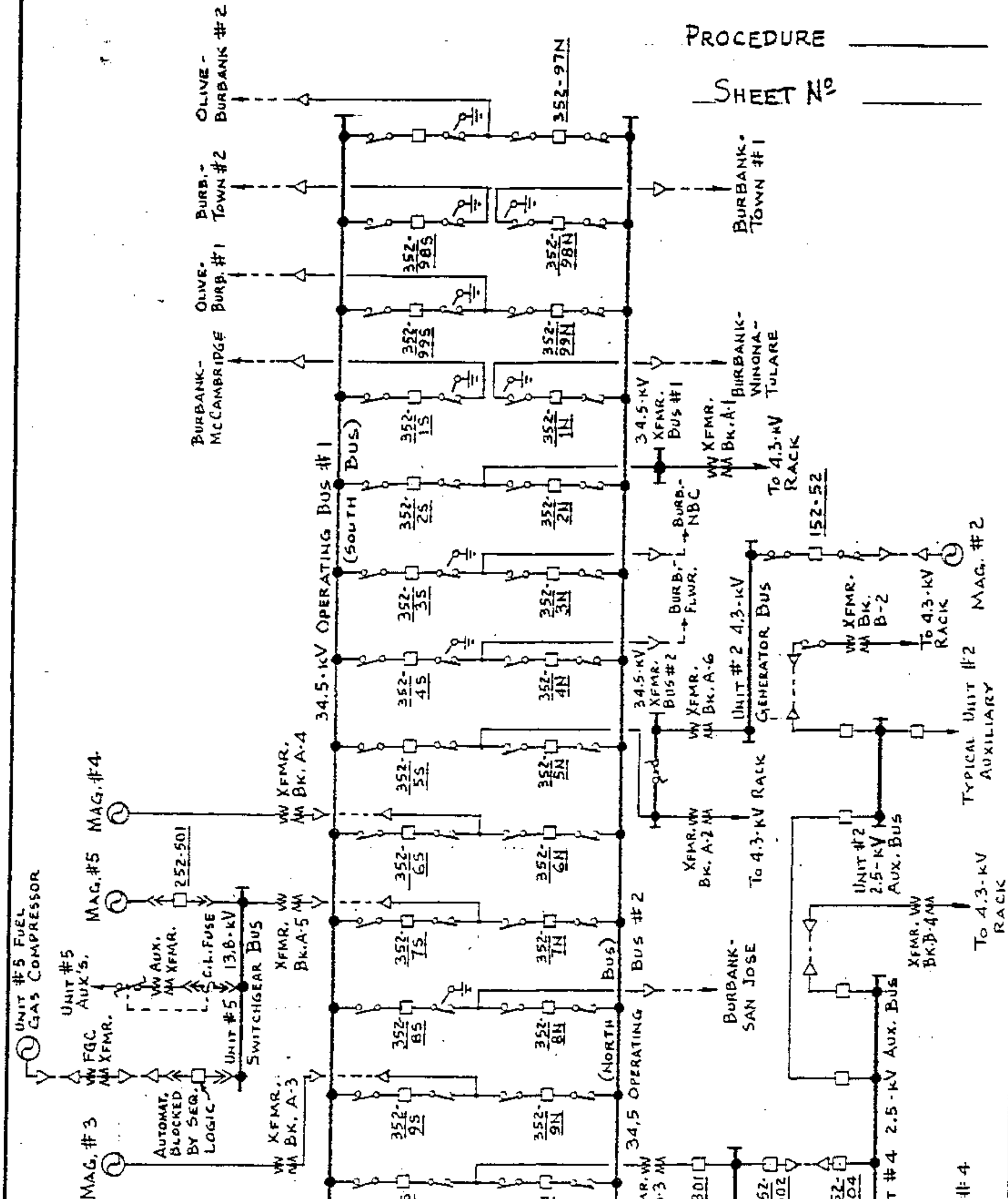
5. Gas turbine controls should be positioned as follows:
   a) Select LOCAL.
   b) Select LINE PRESSURE GAS FUEL. (liquid fuel if gas is unavailable)
   c) Select ISOLATED.
   d) Check protective relays to assure they are NOT tripped.
   e) If gas fuel is unavailable - line up bottled gas assist system, per posted instructions located in Bottled Gas Cabinet.
   f) Mode Selector in Automatic. Operator initiate start on gas turbine locally. He should observe starting events until generator breaker closes. If the Unit aborts, the difficulty should be determined and corrected before attempting another start.

6. After Generator Breaker closes (3550 RPM), Operator must control frequency at 60 cycles, using governor control switch (utilize Tack & Frequency Chart) and voltage at 13.8 kV, using Auto Voltage Control Switch (about 2 MVars).

84303

PROCEDURE ____________

SHEET No ____________



NOTE:
REFER TO DWG. No AS-310 FOR BREAKER POSITION SYMBOLS & OPERATING PROCEDURE.

NO.	REVISIONS	BY	CHECK	APP'V'D	DATE
B	REVISED & RE-DRAWN AS-BUILT	KWC	JRM		10-11-95

DRAWN TZ | SCALE NONE | CHECK EWP | APP'V'D RWC | DATE 1-24-74

CITY OF BURBANK
PUBLIC SERVICE DEPARTMENT

MAGNOLIA POWER PLANT
BLACK-START PROCEDURE

DRAWING NO. AS-312B

7. Start Auxiliary Equipment, as needed, to implement restart of steam units.

NOTE:

1. The Dispatchers can remotely tie together the Olive and Magnolia switchyards. This procedure would allow one gas turbine to supply the entire generating station. If this occurs and a second gas turbine is requested, then it should be considered a NORMAL start with PARALLEL selected.

2. Refer to Dwg. AS-312B for the Magnolia Power Plant black-start procedure.

Next Page is Page 60

POWER PLANT OPERATING ORDER - Revised April 17, 1989

Black Start Olive No. 3

Magnolia No. 5 is normally the first unit utilized for Black Start. Should the need arise to Black Start Olive No. 3, utilize the following procedure:

It should be recognized that a loss of all electrical power would be a very serious occurrence. If this condition occurred, our primary concern would be placing the steam units in a safe condition. Some items requiring immediate attention would be:

A. Verify fuel (oil & gas) is shut off to boilers.

B. Verify D.C. and/or steam driven oil pumps are running.

C. Make-up and reject valves closed.

You are aware we would be without turbine turning gear capability, therefore, proceeding with the Black Start Procedure should be expedited. The following information is to assist you in expediting this event:

1. Strip boiler boards.

2. Field breaker open.

3. Position breakers to agree with Sheet 3A (Olive No. 3 Operation). Breakers requiring position verification (as per sheet 3A) are in three locations:
   a) Olive Control Room (12 breakers),
   b) Volt Breaker Room (2 breakers),
   c) Gas turbine Control House (10 Breakers).

4. Breakers marked with a Green stripe must be OPEN, breakers marked with a RED stripe must be CLOSED before initiating a start on the gas turbine.

5. Verify breaker positions in "Switchyard with SCADA Center. Dispatchers can satisfy all requirements in the Switchyard from the SCADA Center, in 1 or 2 minutes.

6. Gas turbine controls should be positioned as follows:
   a) Select LOCAL.
   b) Select LINE PRESSURE GAS FUEL. (liquid fuel if gas is unavailable)
   c) Select ISOLATED.

   d) Check protective relays to assure they are not tripped.
   e) If gas fuel is unavailable, line up bottled gas assist system, per posted instructions located in Bottled Gas Cabinet.
   f) Mode Selector in Automatic. Operator initiate start on gas turbine locally. He should observe starting events until generator breaker closes. If the Unit aborts, the difficulty should be determined and corrected before attempting another start.

7. After Generator Breaker closes (3550 RPM), Operator must control frequency at 60 cycles, using governor control switch (utilize Tack & Frequency Chart) and voltage at 13.8 kV, using Auto Voltage Control Switch (about 2 MVars). Operator must close L.C. breaker 152-103 (Start up trans. A.C.B. Unit No. 1) and 152-203 (Start up trans. A.C.B. Unit No. 2) within 3 minutes. THESE BREAKER HANDLES ARE PAINTED BLUE. Breakers 152-101 (L.C. Trans. 0-1) and 152-211 (L.C. trans. 0-2) should be closed immediately thereafter. THESE HANDLES ARE ALSO BLUE IN COLOR.

8. Start Auxiliary Equipment, as needed, to implement restart of steam units.

NOTE:
1. The Dispatchers can remotely tie together the Olive and Magnolia Switchyards. This procedure would allow one gas turbine to supply the entire generating station. If this occurs and a second gas turbine is requested, then it should be considered a NORMAL start with PARALLEL Selected.

2. Refer to Dwg. AS-311 for Olive Power Plant black-start procedure.

POWER PLANT OPERATING ORDER - Revised March 23, 1989

Black Start Olive No. 4

Magnolia No. 5 unit is normally the unit first utilized for Black Start. Should the need arise to Black Start Olive No. 4, utilize the following procedure:

It should be recognized that a loss of all electrical power would be a very serious occurrence. If this condition occurred, our primary concern would be placing the steam units in a safe condition. Some items requiring immediate attention would be:

A. Verify fuel (gas and oil) is shut off to boilers.

B. Verify D.C. lube oil pumps running.

C. Make-up and reject valves closed.

You are aware we would be without turbine turning gear capability, therefore, proceeding with the Black Start Procedure should be expedited. The following information is to assist you in expediting this event:

1. Strip boiler boards.

2. Field breaker open

3. Position breakers to agree with Sheet 4A (Olive Unit No. 4 operation). Breakers requiring position verification (as per Sheet 4A) are in three locations: (1) Olive Control Room (12 breakers.), (2) 2500 Volt Room (2 Breakers.), (3) Gas Turbine Control House (10 Breakers.).

   Breakers marked with a Green stripe must be OPEN, breakers marked with a Red stripe must be CLOSED before initiating a start on the gas turbine.

4. Verify with SCADA Center breaker positions in the Switchyard. Dispatcher can satisfy all requirements in the Switchyard from the SCADA Center in 1 or 2 minutes.

5. Olive No. 4 Controls should be positioned as follows:

   a) Select Local
   b) Select Line Pressure Gas Fuel (liquid fuel if gas is unavailable)
   c) Select Isolated
   d) If Gas fuel is unavailable - Line up bottled gas assist system per posted instructions located in bottled gas cabinet.
   e) Select Damper Override (OVRD) position, using key on damper permission override switch.

Select Automatic on synchronizing and breaker control switch. Check protective relays to assure they are not tripped. Initiate Start - Observe start sequence - after breaker closure, Operator must control frequency at 60 cycles (using speed/load control switch) and voltage at .9 power factor (using voltage/var control switch). If the Unit aborts, the difficulty should be determined and corrected before attempting another start. After Generator Breaker closure (will occur at 3500 RPM), Operator must close L.C. breaker 152-103 (start up trans. A.C.B. Unit No. 1) and 152-203 (Start up trans A.C.B. Unit No. 2). THESE BREAKER HANDLES ARE PAINTED BLUE. (Breakers trans. 0-1) and 142-211 (L.C. trans. 0-2) should be closed immediately thereafter. THESE HANDLES ARE ALSO BLUE IN COLOR.

6. Start auxiliary equipment, as needed, to implement restart of steam units.

NOTE:

1. The Dispatchers can remotely tie together the Olive and Magnolia switchyards. This procedure would allow one gas turbine to supply the entire generating station. If this occurs and a second gas turbine is requested, then it should be considered a NORMAL start with PARALLEL selected.

2. Refer to Dwg. AS-311 for Olive Power Plant black-start procedure.

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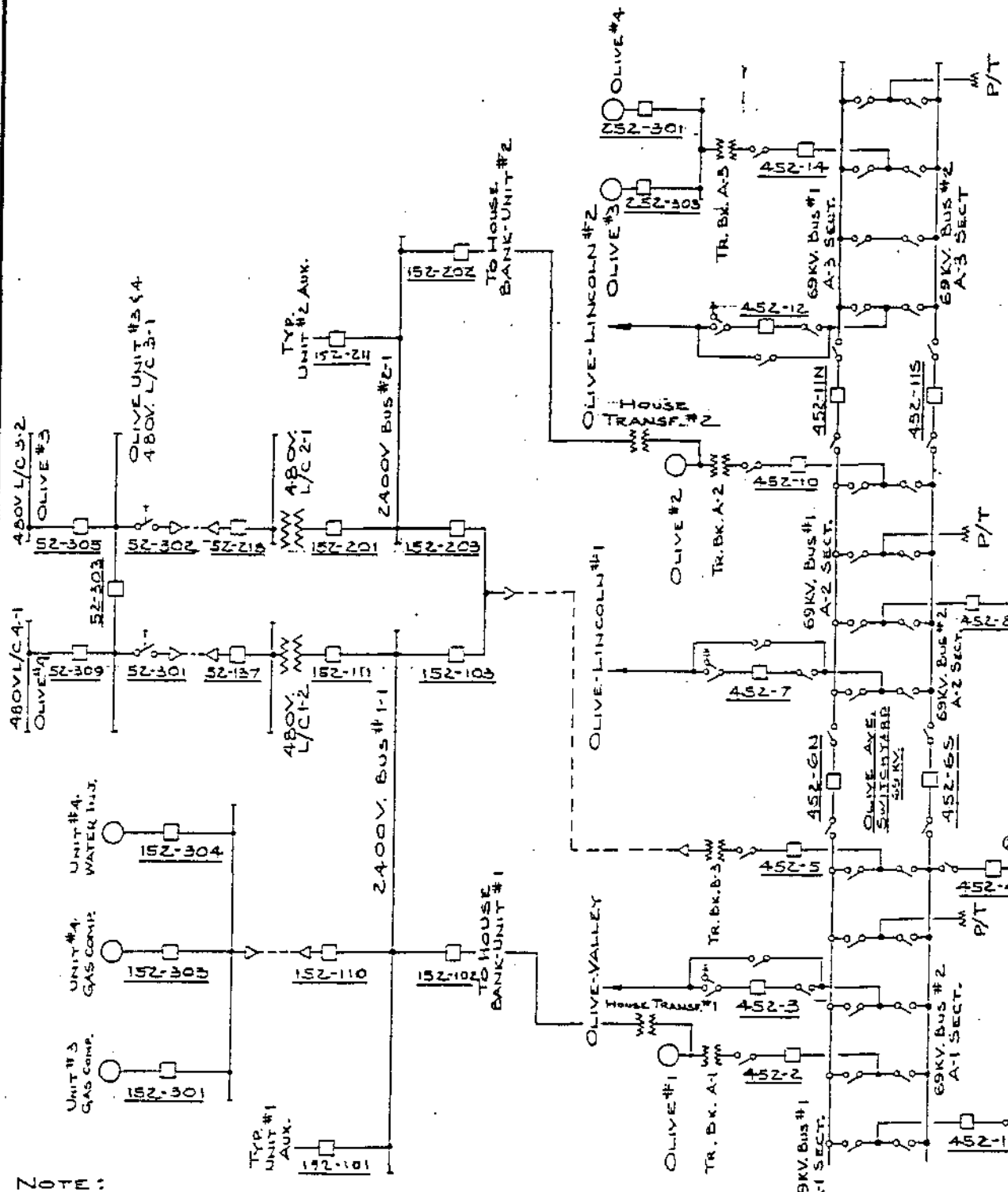


NOTE:

REFER TO DWG. NO AS-310 FOR BREAKER POSITION SYMBOLS AND OPERATING PROCEDURE.

PROCEDURE _____

SHEET NO _____

NO.	REVISIONS	BY	CHECK	APP'D	DATE

DRAWN TZ | SCALE NONE | CHECK | APP'D | DATE 1-23-74

CITY OF BURBANK
PUBLIC SERVICE DEPARTMENT

OLIVE AVE. POWER PLANT
BLACK-START PROCEDURE

DRAWING NO. AS-311

APPENDIX C-1

EMERGENCY DIESEL GENERATOR - START PROCEDURE

It is essential that safety of personnel and equipment be the primary objective of operators in the event of a natural disaster or a total loss of auxiliary power. When it is ascertained that the plant is in a safe condition, attention should be turned to a black-start of the Magnolia #5 Gas Turbine Generator. Refer to black-start procedures.

During this time a start of the Emergency Diesel Generator should be initiated.

The procedure below is not unit specific. It is applicable to either Olive unit and the Shift Supervisor shall decide which unit to energize. Refer to Figure 1 (attached).

1. On the generator control panel put the Generator Starting Switch in the **manual** position. The diesel should then begin cranking and be running up to speed in 15 to 20 seconds. Allow unit to warm up.

2. Assure that all boiler board switches are in the off position.

3. Assure that there are no other breakers closed on LC-3 and LC-4. Check that there are no breakers closed on LC-1 and LC-2 in the 2500V room. Leave feed breaker from LC-1 to LC-3 closed.

4. Isolate LC-1 and LC-2 by opening the low side Load Center transformer breakers.

5. Close the Stand-by Generator molded panel 480V breaker located at the generator.

6. Close the Stand-by Generator Tie breaker located on LC-1.

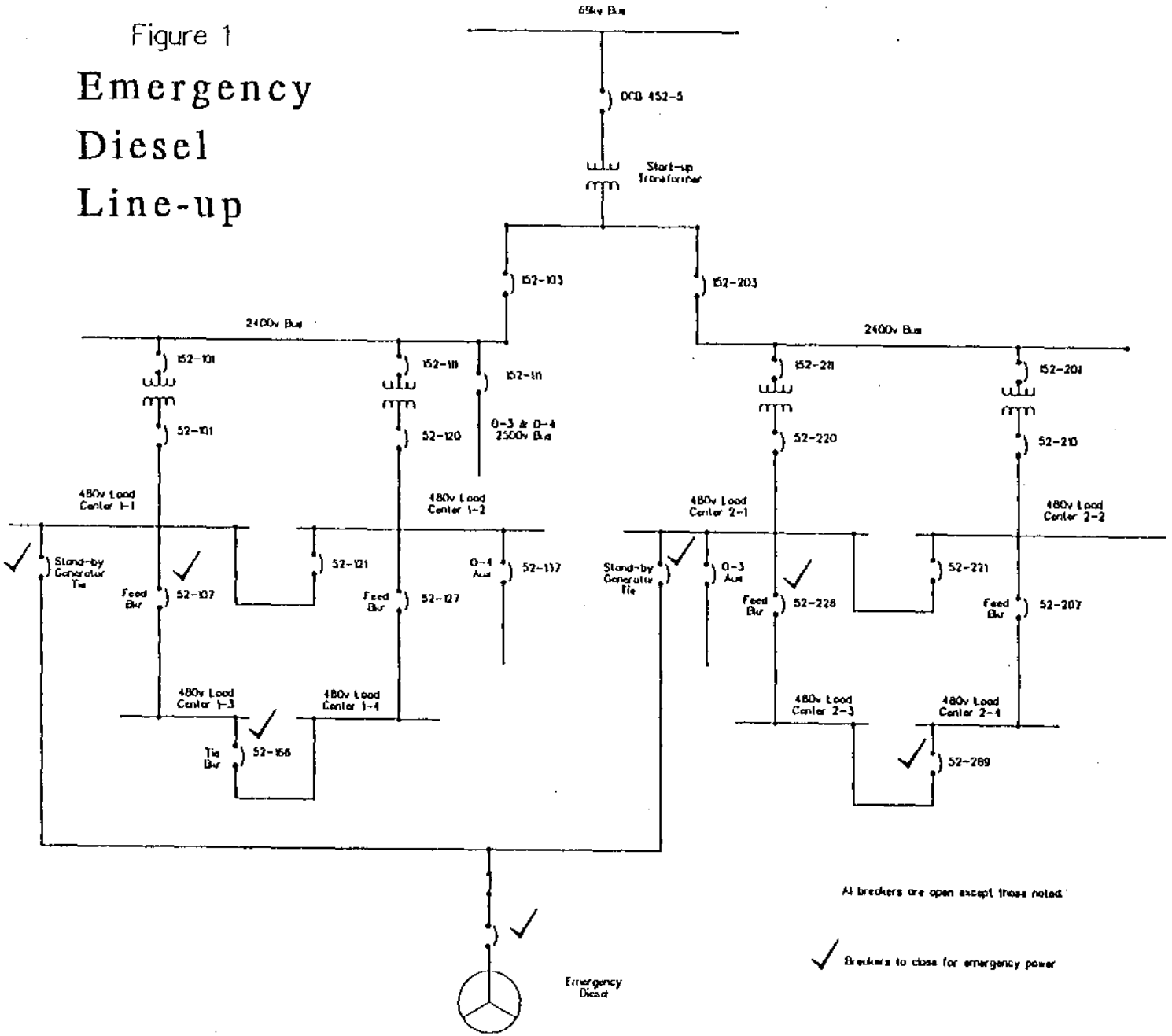
Potential is now established on LC-1. Establish potential to LC-4, where turning gear and associated equipment resides. Use the following procedure:

1. Assure that LC-3 has potential (feed breaker on load center 1 closed).
2. Assure that feed breaker from LC-2 to LC-4 is open.
3. Close tie breaker from LC-3 to LC-4 (located on LC1-3 and LC2-4).
4. Start machinery as needed giving generator time to adjust to increases in load.

After getting the chosen unit energized it is necessary to energize LC 2-3 to start the static battery charger. If it is not possible to energize LC 2-3 then LC 1-3 should be energized and the MG set started.

Figure 1

Emergency Diesel Line-up



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EMERGENCY DIESEL GENERATOR - SHUT-DOWN PROCEDURES

The Emergency Diesel must not be allowed to run in parallel with system power from the station. Therefore, the Diesel must be isolated from the load center before station power is introduced.

1. Reduce load on diesel by securing running machinery.

2. Open the Stand-by Generator tie at L-1.

3. Open the molded panel 480V breaker at the diesel.

4. Allow diesel to idle for 5 minutes for cool-down.

5. Secure diesel by placing the Generator Starting Switch to the off position.

6. Line up plant auxiliaries to normal as needed.

* Refer to Emergency Diesel Line-up diagram "Figure 1" for more details.

Approved by:

Dennis Moran
Power Production Superintendent

Fredric Fletcher
Asst. General Manager

Date: 9/21/95

Martin Drumm
Senior Mechanical Engineer

Xavier Baldwin
Senior Electrical Engineer

2.12.5 Water Operations Section

A. Activate the Water Section of the EOC.

B. Activate the **Field Command Post**.

C. Establish communication between the EOC and the **Field Command Post**, the **Field Command Post** and MWD MARS System, and the **Field Command Post** and employees/units.

D. Complete Emergency Checklist as follows:

1. Employees- callout/check in
2. Equipment- Availability
3. MWD status- connection Nos. 1 through 5
4. Reservoir status- storage on hand
5. Power outages
6. Site inspections
7. System damage

E. Continue response to emergency until completed.

3.0 EMERGENCY EVACUATION PLAN

Most PSD employees work in one of three general locations:

A. the Administrative/Water Building

B. the Field Services Shops/Electric Shops/Warehouse complex

C. the Olive/Magnolia Plants.

For purposes of evacuation planning, these locations have been subdivided into fourteenn Work Zones. For each Work Zone there is an Evacuation Zone to which all employees within the Work Zone are assigned. There are eleven Evacuation Zones in all: Appendix N shows the locations on a plot plan of the PSD Yard.

Each Work Zone has an assigned Zone Warden and alternate. The Zone Warden has several key responsibilities:

A. The Zone Warden will decide whether or not to evacuate the Work Zone.

B. The Zone Warden will direct the Work Zone employees to the proper Evacuation Zone in a safe and orderly manner. In some cases, the Zone Warden may select an alternate

Evacuation Zone.

C. The Zone Warden will note the location of any injured or trapped employee and communicate this information to the **Field Command Post.**

D. The Zone Warden, generally with help from available supervisors, will determine which employees have successfully evacuated to their Evacuation Zones. In some cases, there may be missing employees. The Zone Warden will communicate this information to the **Field Command Post**, which is located in the Field Services Office.

E. The Zone Warden will release employees from their Evacuation Zones when authorized to do so by the Command Center.

The alternate will assist the Zone Warden in these responsibilities.

Appendix M presents a list of the Work Zones, their associated Zone Wardens and alternates, and the associated Evacuation Zones and alternates.

REMEMBER: If you are unable to reach your assigned Evacuation Zone, proceed to an Alternate Evacuation Zone.

3.1 BEFORE THE EVACUATION

Know the Zone Warden and your assigned Evacuation Zone. Be familiar with primary and alternate exit routes. Participate in evacuation drills.

3.2 DURING THE EVACUATION

Immediately following the order to evacuate, proceed with the following steps as personal safety permits.

A. Go to your assigned emergency exit. If your preselected exit route is blocked or involved in the emergency incident, be prepared to proceed to an alternate exit.

B. Stay calm. Follow the instructions from emergency response personnel or Zone Wardens and proceed to your Evacuation Zone. At the time of an emergency, you may not be in your normal Work Zone. Remain with the Work Zone you are visiting and follow the instructions of the Zone Warden. If visitors to PSD are in your Work Zone, be sure that they are properly evacuated.

C. Assemble in your Evacuation Zone. Your supervisor or Zone Warden will then determine if anyone is missing. The Zone Warden will report the names and possible

location of missing employees to the **Field Command Post**. Therefore, if you become separated from your group and evacuate to an alternate Evacuation Zone, you should quickly, but safely, confirm your safe evacuation to the **Field Command Post**. If it is safe, you may then proceed to your normally assigned Evacuation Zone.

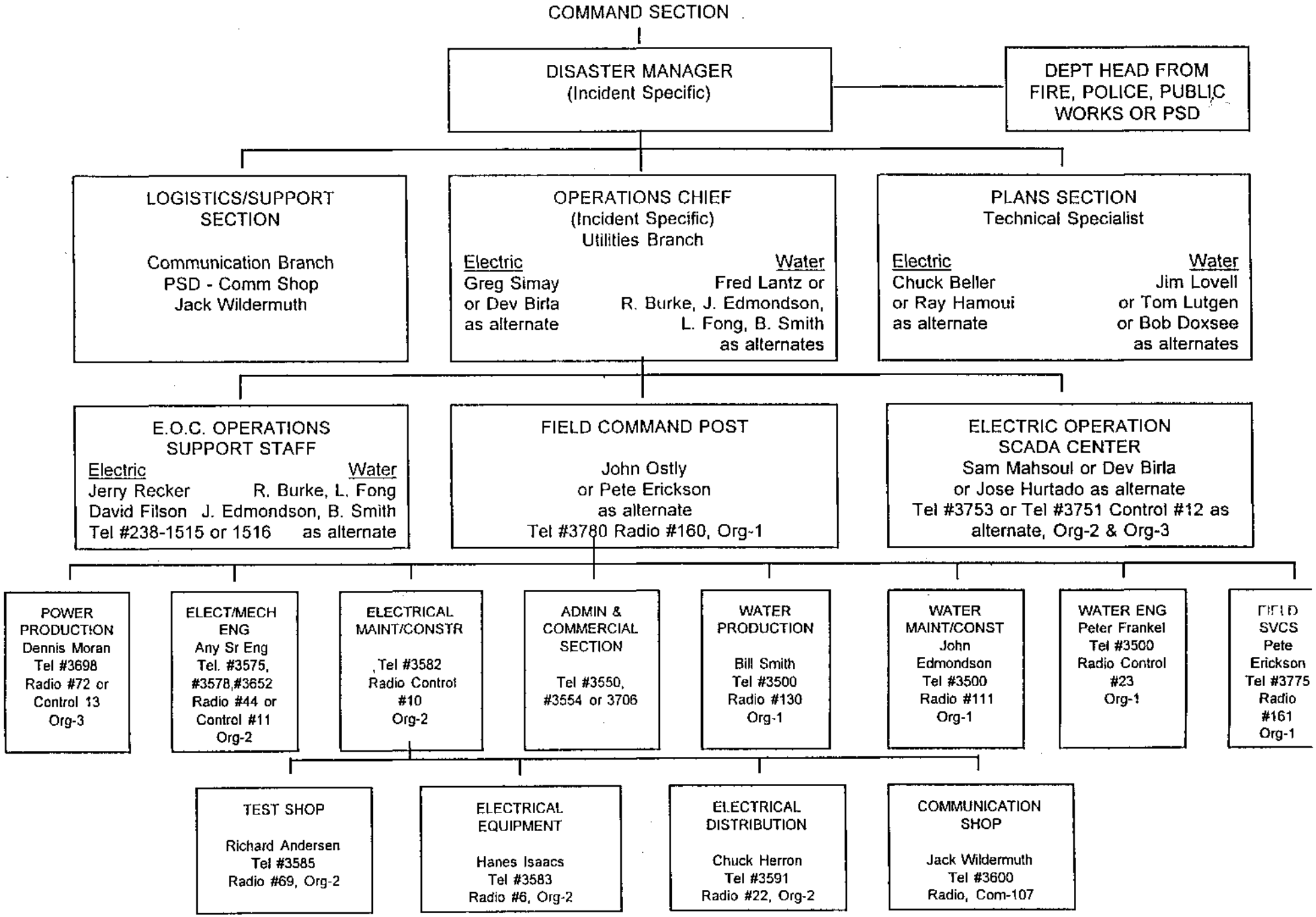
D. If you are in your normally assigned Evacuation Zone, remain there to receive instructions from emergency response personnel.

E. During an evacuation, should you or an employee of your group be injured and require emergency medical assistance, report immediately to the emergency response personnel or the **Field Command Post**. First aid supplies needed for emergency medical assistance are available at the **Field Command Post** and an employee trained in first aid and CPR will provide the needed assistance.

APPENDIX - SECTION

LIST OF APPENDICES

APPENDIX "A"



PSD - EMERGENCY TABLE OF ORGANIZATION

NOTES:

A. Line of Authority

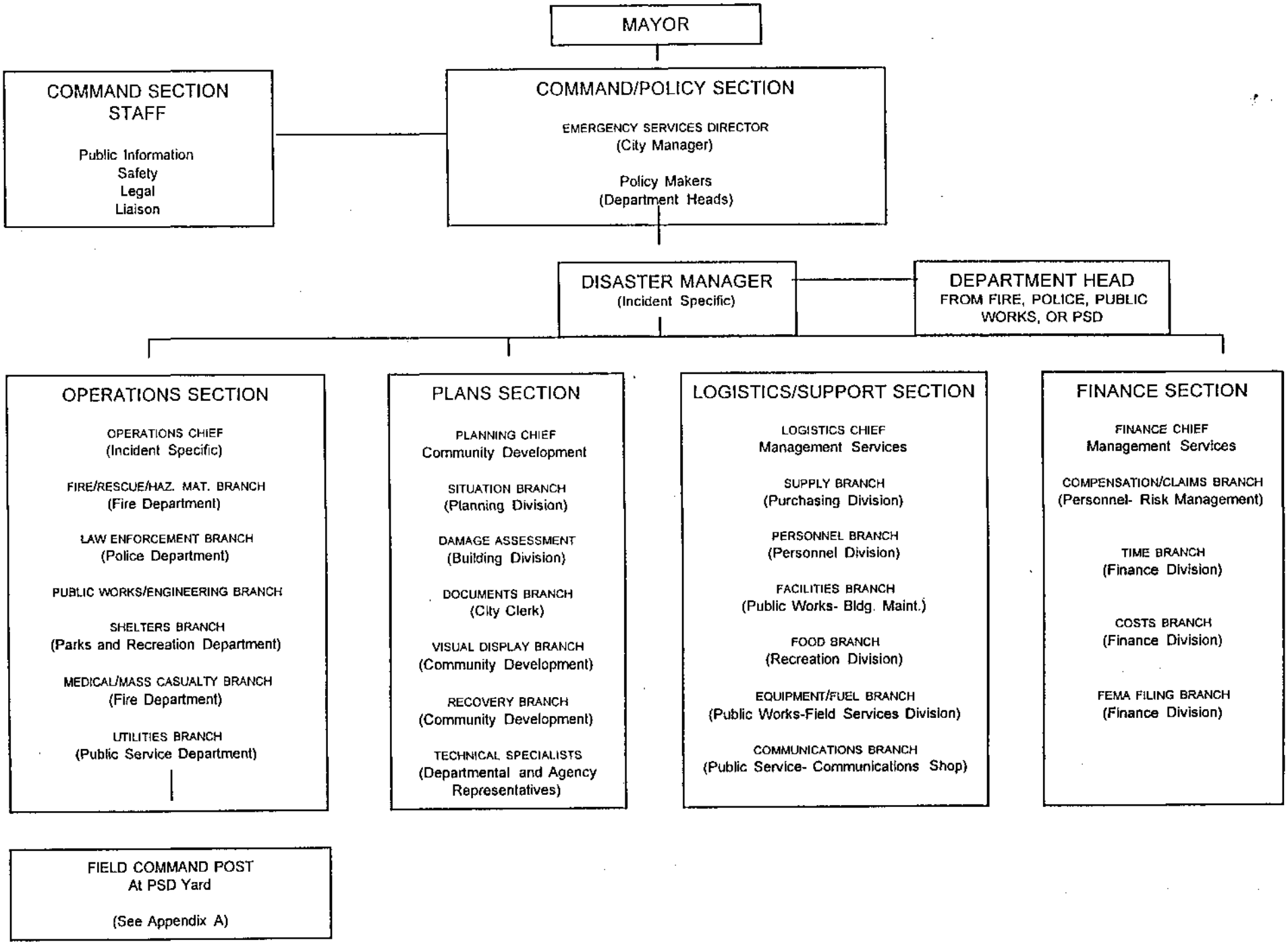
The Field Services Manager, or the senior qualified person from Field Services reporting to work and in communication with the Emergency Operations Center (EOC), is in charge and shall activate the **Field Command Post** (see Section 1.3.4- Line of Authority). Eleven other persons are needed for EOC operation besides Ronald V. Stassi, General Manager. Tentatively, those persons from the Electrical Services Division are: Gregory L. Simay, Dev Birla, Jerry Recker, Chuck Beller, Dave Filson, Leonard Silva, and Don Tyndall. The remaining persons from the Water Division are: Fred Lantz, Bill Smith, John Edmondson, Ross Burke or Leighton Fong, Albert Lopez, Joe Meythaler and Jim Lovell, Tom Lutgen, or Bob Doxsee.

B. **Field Command Post**

The **Field Command Post** will be located at the PSD Yard located at 164 West Magnolia Blvd. If the buildings are safe, the field supervisors will delegate from the normal worksite. However, if the buildings are not safe, a temporary **Field Command Post** will be established elsewhere on the PSD Yard property.

The MARS emergency radio system, emergency frequency scanning, event logging, and the status boards will be maintained at the **Field Command Post**.

APPENDIX B
EMERGENCY OPERATIONS CENTER (EOC)



APPENDIX B (CONTINUED)

PERSONNEL ASSIGNED TO EMERGENCY OPERATION CENTER

NAME	ASSIGNED DUTY	HOME PHONE NUMBER
Ronald V. Stassi	Management	(818) 248-3887
Gregory L. Simay	Operations Table - Electrical	(919) 842-7074
Fred Lantz	Operations Table- Water	(714) 629-2802
Dev Birla	Operations Table- Alternate or SCADA Center	(818) 559-2551
Ross Burke or John Edmondson or Leighton Fong or Bill Smith	Operations Table- Alternates or Status Reporting	(818) 986-3496 (818) 841-7467 (818) 244-6962 (818) 845-1290
Jerry Recker	Status Reporting	(818) 842-2411
David Filson	Status Reporting	(818) 242-2237
Don Tyndall	Logistics	(818) 841-5493
Chuck Beller	Planning	(818) 843-2502
Ray Hamoui	Planning- Alternate	(818) 241-5543
Jim Lovell	Planning	(818) 352-1642
Tom Lutgen or Bob Doxsee	Planning- Alternate	(818) 398-8800 (818) 996-1369
John Ostly	**Field Command Post**	(818) 566-9883
Leonard Silva	Logistics	(818) 845-7728

APPENDIX G

ELECTRICAL DAMAGE REPORT SHEET
PRIORITY CHECK LIST

1 = O.K. 2 = Damaged 3 = Needs Immediate Attention

	FIRST PRIORITY	1	2	3	COMMENTS
1.	RS-E: Tie Lines with Los Angeles from RS-# to Valley Switching Station				Provide comments such as: "...Pacific D.C. Intertie down due to serious damage...", etc.
2.	Generating Units: Olive #1, #2, #3 and #4				
3.	Generating Units: Magnolia #2, #3, #4, and #5				
4.	Valley Switching Station				
5.	Olive Switching Station				
6.	Lincoln Switching Station				
7.	69-kv Lines within the City: Olive-Valley, Lincoln-Valley, Lincoln-Valley, and Olive-Lincoln #1 and #2, and T-O-W Line				
	SECOND PRIORITY				
1.	34.5-kv Subtransmission System with at least one line to: Emergency svs., other critical loads				
	Distributing/Customer Stations: 34.5-kv,4.33-kv,12.47 kv, service to emergency services and other critical loads				
3.	34.5-kv Subtransmission System with at least one line to: Each distributing/customer station				
4.	34.5-kv Subtransmission System: All remaining				
	THIRD PRIORITY				
1.	Feeders with service to: critical patients				
2.	12.47-kv Feeders with service to: Media City Centre, high rise bldgs, remaining 12.47-kv fdrs.				
3.	Distribution Feeders: All remaining				
4.	Street Lighting: Circuits on major boulevards				
	FOURTH PRIORITY				
1.	Distribution Transformers/Service Drops: All problems				
2.	Street Lighting: Remaining circuits				
3.	All Else Remaining Not Covered Above:				

APPENDIX D

RECOURSES AND SUPPORT/UTILITIES/ELECTRIC
RESPONSE TO MAJOR EARTHQUAKE
OR OTHER NATURAL DISASTER
EMERGENCY ACTION CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
1.	Begin **Incident Management** (see Line of Authority)	senior qualified person	
2.	Activate **Field Command Post**	senior qualified person	
3.	Establish Communications: a. City radio *E-**Field Command Post** b. SCADA Center **ES Power Plant ****EP c. Monitoring **ES/***EO d. EOC **ES/*E		
4.	Mobilize personnel and determine available workforce	**Field Command Post**	
5.	Determine available equipment: a. begin event logging of telephone, PSD radio, and other Departments' notice of damaged facilities, leaks, breaks, and outages. Post on status boards. b. begin damage assessment with available staff by system priority checklist Report events to **Field Command Post**	**Field Command Post** Electrical Office/Engineering Commercial Section and secretarial staff Electric field staff, including SCADA and Power Plant personnel	
6.	Determine available electrical capacity and energy: a. tie with RS-E b. base units: Olive Nos. 1 and 2; Magnolia Nos. 3 and 4 c. peaking units: Olive Nos. 3 and 4; Magnolia No. 5 Report results to EOC and **Field Command Post**	SCADA Center and Power Plant personnel, under the direction of the E.O.C.	
7.	Classify emergency: a. normal problem b. minor emergency c. major emergency d. disaster Report classification to Field Command Post/EOC, noting extent of damage, area of disruption, possible duration of outages, and level of hazard.	Electric Field staff, SCADA and Power Plant personnel	
8.	Allocate emergency generator portable generators for: a. hospitals b. KROQ c. NBC d. other critical loads such as emergency shelters Report proposed allocation of supply to EOC for confirmation	E.O.C. and Electrical Administration Coordinate with Fire Department	

APPENDIX D

RECOURSES AND SUPPORT/UTILITIES/ELECTRIC
RESPONSE TO MAJOR EARTHQUAKE
OR OTHER NATURAL DISASTER
EMERGENCY ACTION CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
9.	Set electrical system priorities: a. areas to isolate and secure system, if hazardous b. set up temporary electrical supply for shelters c. minor repairs to restore ties with Los Angeles and 69-kv system d. minor repairs to secure and restore 34.5-kv system Dispatch personnel to make shutdowns and repairs based on priorities	E.O.C. and **Field Command Post**	
10.	Coordinate with Fire Department: a. status of electrical supply to Fire Department and Fire Stations through EOC	**Field Command Post**	
11.	Determine materials on hand and estimated quantities required for Stage I recovery	Electrical field staff and Warehouse No. 2	
12.	Contact local suppliers for supplies needed to restore service	Warehouse No. 2	
13.	Contact local contractors and rental companies for additional personnel and equipment	Warehouse No. 2/Purchasing Department	
14.	Isolate, repair, and operate the electrical system	Electrical field staff/SCADA/Power Plant	
15.	Activate mutual aid to and from neighboring utilities: a. materials b. equipment c. personnel	City Administration-General Manager of PSD, or his designee	
16.	Aid in rescue operations and repairs to other City facilities, if possible	Electrical field staff under the direction of EOC and **Field Command Post**	

*E - **Field Command Post** **ES - Electric SCADA system

***EO - Electric Office ****EP - Electric Power Plant

EOC - Emergency Operations Center

APPENDIX E
ELECTRICAL DIVISION
ACTIVATE FIELD COMMAND POST CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
1.	Begin **Incident Management**	Field Services Manager or senior qualified person	
2.	Activate **Field Command Post**	Field Services Manager or senior qualified person	
3.	Establish Communications: a. City radio- PSD Electrical frequency b. SCADA Center (only during the time before the EOC becomes active) c. Power Plant d. Electrical Office e. EOC		
4.	Mobilize personnel and determine available workforce	**Field Command Post**	
5.	Determine available equipment	**Field Command Post**	
6.	Recall personnel and equipment to nearest staging area (PSD Yard, or any other designated place)	Electrical and Water Engineering, field staff, Commercial, and Power Plant personnel, except for SCADA personnel	
7.	Give initial assignments: a. Communications - PSD radio SCADA Center Power Plant - Monitoring - EOC b. Recordkeeping - Event log - Personnel/equipment - Status boards - Emergency work orders - EOC operations (already determined) - Aerial survey c. Personnel/Crew/Equipment Assignments - Field survey team (electrical lines status) #1 #2 #3 #4 #5 #6 - System status #1 #2 - Switching/distributing stations equipment status #1 #2 #3 #4	**Field Command Post** Engineering staff, Commercial Section, secretarial staff, and any personnel not covered Car 22 Unit #20 Unit #18 Unit #61 Unit #67 Unit #7 Unit #34 SCADA Center Unit #55 Car 6 Unit #35 Unit #58 Unit #59 Unit #54	

APPENDIX E
ELECTRICAL DIVISION
ACTIVATE FIELD COMMAND POST CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
8.	- Materials team - Heavy rescue team - First aid team - Communication- radio and telephone - Relay targets or other testing/hardware problems	Unit #87 Unit #24 Comm 101 Comm 102 Com 109 Units #69, #73, #79, and other Test Tech. radio numbers	
9.	Begin damage assessment with Field Survey teams (see Electrical Damage Report Sheet)	Electric field staff, and SCADA and Power Plant personnel	
10.	Determine availableelectrical capacity and energy: a. RS-E b. on-site generation base units c. on-site generation gas turbines d. any other sources	SCADA Center and Power Plant personnel, under the direction of E.O.C.	
11.	Determine electrical system priorities: a. areas to be isolated and secured b. restoration of tie at RS-E c. bring on-site generation on line if tripped d. auxiliary power for generators e. transmission system throughout the City	E.O.C. and Electrical Administration	
12.	Effect electrical system isolation and secure facilities: a. transmission/subtransmission system - stations: - lines: b. distribution system - stations: - field: c. customer services - on-site transformation: - service from pole or underground:	 Electric Shop/SCADA Line Section Electric Shop/SCADA Line Section Electric Shop Line Section	
13.	Report electrical system status to **Field Command Post** or EOC at fifteen minute intervals	All Electric field staff	
14.	Regain composure		

APPENDIX F
WATER SYSTEM DAMAGE REPORT SHEET
PRIORITY CHECK LIST

1 = O.K. 2 = Damaged 3 = Needs Immediate Attention

		1	2	3	COMMENTS
	FIRST PRIORITY				
1.	Reservoir No. 5				
2.	Reservoir No. 1				
3.	Reservoir No. 4				
4.	Palm Avenue Pump and Chlorination Station				
5.	Lake Street GAC Facility				
6.	Valley Pumping Plant				
7.	MWD B-1 Connection				
8.	MWD B-5 Connection				
9.	MWD B-4 Connection				
10.	MWD B-2 Connection				
	MWD B-3 Connection				
	SECOND PRIORITY				
1.	Reservoir No. 2				
2.	Reservoir No. 3 and Radio Tower				
3.	McClure Tank and Pumphouse				
4.	Brace and Lamer Tanks				
5.	Haven Tanks and B-33				
6.	Groton Tank and B-22				
7.	Andover Tank				
8.	Belaire Tank and C Pump				
9.	Starlight Tanks				
10.	Stough Tanks and Pumphouses				
11.	Debell No. 1 Tank and Debell No. 2 Pump				
12.	Debell No. 2 Tank				
13.	Wildwood No. 1 Tank and Wildwood No. 2 Pump				

APPENDIX F
WATER SYSTEM DAMAGE REPORT SHEET
PRIORITY CHECK LIST

1 = O.K. 2 = Damaged 3 = Needs Immediate Attention

		1	2	3	COMMENTS
14.	Wildwood No. 1 Pump				
15.	Sunset Canyon System				
16.	Booster No. 30				
17.	Via Montana Tanks				
18.	Paseo Redondo Tanks				
19.	Glendale/Burbank Interties				
20.	Pipeline: Hollywood Way from San Fernando to Olive Avenue				
21.	Pipeline: Olive Avenue from Hollywood Way to First Street				
22.	Pipeline: Palm Avenue from First Street to Sunset Canyon Drive				
23.	Pipeline: Kenneth Road from Verdugo Avenue (B-1) to MWD B-5 (including Jolley Valve Vault)				
24.	Pipeline: Parish Street from Reservoir No. 5 to Tulare Avenue (B-4)				
25.	Pipeline: Tulare Avenue from Scott Road (B-4) to Hollywood Way				
26.	Pipeline: Magnolia Avenue from Sunset Canyon Drive to Kenneth Road				
27.	Pipeline: Scott Road from Tulare Avenue (B-4) to San Fernando				
28.	Pipeline: San Fernando from Scott Road to Kenneth Road				
29.	Well No. 6A				
30.	Well No. 17				
31.	Well 12A				

APPENDIX F
WATER SYSTEM DAMAGE REPORT SHEET
PRIORITY CHECK LIST

1 = O.K. 2 = Damaged 3 = Needs Immediate Attention

	1	2	3	COMMENTS
32. Well No. 13				
33. Well No. 10				
34. Well No. 11				
35. Well No. 12				

APPENDIX G
RECOURSE AND SUPPORT/UTILITIES/WATER
RESPONSE TO A MAJOR EARTHQUAKE
OR OTHER NATURAL DISASTER
EMERGENCY ACTION CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
1.	Begin **Incident Management** (see Line of Authority)	senior qualified person	
2.	Activate **Field Command Post**	senior qualified person	
3.	Establish Communications: a. City Radio *W b. MWD-MARS **WO c. Monitoring ***WE d. EOC ***WE		
4.	Mobilize personnel and determine available workforce	**Field Command Post**	
5.	Determine available equipment: a. begin event logging of telephone, PSD radio, and other Dewpartments' notice of damaged facilities, leaks, breaks, outages. Post on water status boards. b. begin damage assessment with available staff by system priority checklist Report events to **Field Command Post**	**Field Command Post** Water Engineering Water field staff	
6.	Determine available water supply: a. reservoir storage b. MWD c. Valley Pumping Plant/Lockheed Plant d. interconnections: - Glendale - LADWP e. GAC/wells Communicate results to Water Administration	Water Operation	
7.	Classify emergency: a. normal problem b. minor emergency c. major emergency d. disaster Report classification to **Field Command Post**/EOC, noting extent of damage, area of disruptio, possible duration of outages, and level of hazard	Water Administration	

APPENDIX G
RECOURSE AND SUPPORT/UTILITIES/WATER
RESPONSE TO A MAJOR EARTHQUAKE
OR OTHER NATURAL DISASTER
EMERGENCY ACTION CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
8.	Allocate emergency water supply for: a. potable uses b. firefighting Report proposed allocation of supply to EOC for confirmation	Water Administration	
9.	Set water system priorities: a. areas to isolate and secure system, if hazardous b. swet up temporary water supply locations (i.e., water trucks, water faucents at fire hydrants) c. minor reparis to restore service d. major repairs to secure and restore system Dispatch personnel to make shutdowns and repairs based on priorities	Water Administration	
10.	Coordinate with Fire Department a. status of water supply to Fire Department and Fire Stations through EOC, including hydrants out of service and firefighting water supply	**Field Command Post**	
11.	Determine materials on hand and estimated quantity needed for Stage I recovery	Water M/C and Warehouse No. 2	
12.	Contact local suppliers for pipe and fittings needed to restore service	Warehouse No. 2	
13.	Contact local contractors and rental companies for additional personnel and equipment	Warehouse No. 2/Purchasing Department	
14.	Isolate, repair, and operate the water system	Water field staff	
15.	Activate mutual aid to and from neighboring utilities: a. materials b. equipment c. personnel	City Administration-General Manager of PSD or his designee	
16.	Aid in rescue operations and repairs to other City facilities, if possible	Water field staff, under direction of **Field Command Post**	

*W' - **Field Command Post** **WO - Water Office ***WE - Water Engineering

EOC - Emergency Operations Center

APPENDIX H
WATER DIVISION
ACTIVATE FIELD COMMAND POST CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
1.	Begin **Incident Management** (see Line of Authority)	Field Services Manager or senior qualified person	
2.	Activate **Field Command Post**	Field Services Manager or senior qualified person	
3.	Establish Communications: a. City radio - PSD frequency b. sign on MWD-MARS c. monitoring d. EOC		
4.	Mobilize personnel and determine available workforce	**Field Command Post**	
5.	Determine available equipment	**Field Command Post**	
6.	Recall personnel and equipment to nearest staging area (PSD Yard, Valley Pumping Station, Palm Booster, Reservoir No. 5, etc)	**Field Command Post**	
	Give initial assignments: a. Communications - PSD radio - MARS - monitoring - EOC b. Recordkeeping - event log - personnel/equipment - status boards - emergency work orders - EOC-Water Operations - aerial survey c. Personnel/Crew/Equipment Assignments - field surveny team #1 #2 #3 #4 - gate crew #1 #2 - isolation team #1 #2 #3 #4 - materials team - heavy rescue team - first aid team	**Field Command Post** Unit #130 Unit #131 Unit #132 Unit #133 and Unit # 134 Unit #114 Unit #131 Unit #111 Unit #116 Unit #122 Unit #151	

APPENDIX H
WATER DIVISION
ACTIVATE FIELD COMMAND POST CHECKLIST

	ACTION	ASSIGNED RESPONSIBILITY	VERIFIED (✓)
8.	Begin damage assessment with Field Survey teams (see Water Damage Report Sheet)	Water field staff	
9.	Determin water system priorities: a. areas to isolate and secure b. retention of water supply c. system interties d. temporary power for wells and boosters e. set up temporary water supplies f. minor repairs to restore service g. major repairs to restore service		
10.	Effect water system isolation and secure facilities: a. *transmission mains* b. reservoirs and boosters - P/O c. distribution system and F.H.s - isolation teams d. service shut-off - isolation teams a. status of water supply to Fire Department and Fire Stations through EOC, including hydrants out of service and firefighting water supply		
11.	Report water system status to **Field Command Post** or EOC at fifteen minute intervals	All Water field staff	
12.	Regain composure		

APPENDIX I
WATER DIVISION
FIELD COMMAND POST MATERIALS AND SUPPLIES

The following PSD locations have been designated by priority as the Water Division **Field Command Posts**:

Priority	Location
1.	Water Engineering Office PSD Yard 164 West Magnolia Blvd.
2.	Control Room Valley Pumping Station 2030 Hollywood Way
3.	Pump Room Palm Avenue Booster 300 North Sunset Canyon Road

Each of the listed locations will be furnished with the following materials and supplies in order to support a **Field Command Post** and initial water system response activities:

1. fire hydrant status board
2. water system status board
3. one set, counter book atlas sheets
4. one set, intersection detail books
5. emergency tool box
6. gate valve key (five each)
7. water service key: small size (five each), large size (five each)
8. gate box pick (five each)
9. fire hydrant wrench (five each)
10. first aid kit (five each)
11. flashlight with batteries (10 each)
12. one box highway flares
13. Water Division lock keys (five sets)
14. writing materials, forms, pens, tape, markers, etc.
15. gloves (six pair)
16. round point shovels (five each)
17. finger wrenches (five each)
18. digging spoons (various sizes, three sets)

The Water System Manager and the Fire Department Disaster Preparedness Coordinator will inspect and inventory the above listed **Field Command Post** locations and materials annually on the first working day of the month of May. Any missing materials or supplies will be replaced immediately.

APPENDIX J

RECORDKEEPING FORMS

The attached forms are to be used as described in Section 1.11- Recordkeeping. Below is a list of the attached recordkeeping forms:

1. City Status Report
2. City Resource Request Form
3. Reconnaissance Report
4. Labor Record
5. Force Account Record
6. Rented Equipment Record
7. Force Account Equipment Record
8. Materials Record
9. Job Order From for Emergency Repair to City Property

APPENDIX C NOTES: There are additional forms required by the County of Los Angeles Emergency Action Plan. Copies of these forms are attached this Appendix J.

APPENDIX E NOTES: There are additional forms required by the County of Los Angeles. Copies of these forms are attached under this Appendix J. All personnel should keep track of time related to any particular job or work order. This information is vital for reimbursement from the State or Federal Government.

APPENDIX K
LOCATION OF MAJOR CHEMICALS USED AT PSD

1. Power Plants

	Chemical Name:	Location:	Amount:
a.	Sulfuric Acid	Olive Plant Demineralizer Olive No. 1 Cooling Tower East of Magnolia No. 2 Cooling Tower	2,500 gallons 2,500 gallons 2,500 gallons
b.	Sodium Hydroxide	Olive Plant Demineralizer	2,000 gallons
c.	Chlorine	Olive No. 1 Cooling Tower Southwest of Magnolia No. 3 Cooling Tower	2 tons 4 tons
d.	Betz 22k Chemical	Olive No. 1 Cooling Tower Magnolia No. 2 Cooling Tower	800 gallons 400 gallons
e.	Betz 3021	Olive No. 1 Cooling Tower Magnolia No. 2 Cooling Tower	800 gallons 400 gallons
f.	Hydrogen Gas (Compressed)	Olive Plant Magnolia Plant	7,750 cubic feet 7,750 cubic feet

2. Field Services

	Chemical Name:	Location:	Amount:
a.	Solvents/Paints	Southwest side of Paint Shop (lacquer thinner) Southwest side of Paint Shop (mineral spirit)	1-55 gallon drum 1-55 gallon drum
b.	Propane	Southeast corner of Paint Shop	1,200 gallons

3. Warehouse No.2

	Chemical Name:	Location:	Amount:
a.	Paints	Warehouse Paint Room	1,400 gallons
b.	Solvents	Warehouse Paint Room	150 gallons
c.	Acetylene	Warehouse Storage Room	2,000 cubic feet
d.	CO_2	Wrehouse Storage Room	480 cubic feet
e.	O_2	Warehouse Storage Room	2,980 cubic feet

4. Water Production

	Chemical Name:	Location:	Amount:
a.	Chlorine	Palm Avenue Station 300 North Sunset Canyon	300 pounds
		Reservoir No. 5 3200 Scott Road	600 pounds
		PSD Forebay 320 North Lake Street	300 pounds
		Valley Pumping Plant 2030 Hollywood Way	8000 pounds
b.	Calcium Hypochlorite	Valley Pumping Plant 2030 Hollywood Way	400 pounds
c.	Anhydrous Amonia	Valley Pumping Plant 2030 Hollywood Way	3000 pounds
		PSD Forebay 320 North Lake Street	300 pounds

d.	Sulfur Dioxide	PSD Forebay 320 North Lake Street	300 pounds
e.	Caustic Soda	Valley Pumping Plant 2030 Hollywood Way	2200 pounds

Emergency Phone Numbers:

Chem Trec - (800) 424-9300
Chlorine Institute - (202) 775-2790
EPA 24-hour National Response Center - (800) 424-8802 or (202) 426-2675
Western States Chemical Supply Corporation - (800) 255-6422

5. Electrical Division

	Chemical Name:	Location:
a.	PCB Contaminated Oil	Found in some electrical equipment throughout the City. Detailed records available with the PCB Coordinator.

6. PSD Yard

	Chemical Name:	Location:
a.	PCB Contaminated Waste	PCB Shed

NOTE: Material Safety Data Sheets for all of the above chemicals are available within the division they are listed under. One set of each MSDS is kept with the PSD Guard and in the PSD Safety Office.

APPENDIX L

DR No._____

(Police Department Use Only)

BURBANK POLICE DEPARTMENT
BOMB THREAT CALL CHECKLIST

ASK:

1. Exact location of the bomb?

_____
_____
_____

2. Time set for detonation?

_____
_____
_____

3. What does it look like?

_____
_____
_____

4. What is the explosive?

_____
_____
_____

5. Why was it placed?

_____
_____
_____

6. Exact language used:

_____
_____
_____
_____
_____
_____

(Obtain name and address of caller if possible.)

7. ☐ Male ☐ Female

☐ Adult ☐ Child

Estimated age _____ Race _____

8. Speech (Check applicable boxes)

☐ Slow	☐ Excited	☐ Disguised
☐ Rapid	☐ Loud	☐ Broken
☐ Normal	☐ Normal	☐ Sincere

Accent _____

9. Background noises _____

_____

_____

_____

_____

_____

10. Name of person receiving the call

_____

11. Date _____ and time _____ of call

DIAL THE FOLLOWING NUMBER IMMEDIATELY AND REPORT THE CALL

9 - 911

NOTIFY YOUR SUPERVISOR, but *do not discuss the call with other personnel*

APPENDIX M

WORKING AREAS, ZONE WARDENS, AND EVACUATION ZONES

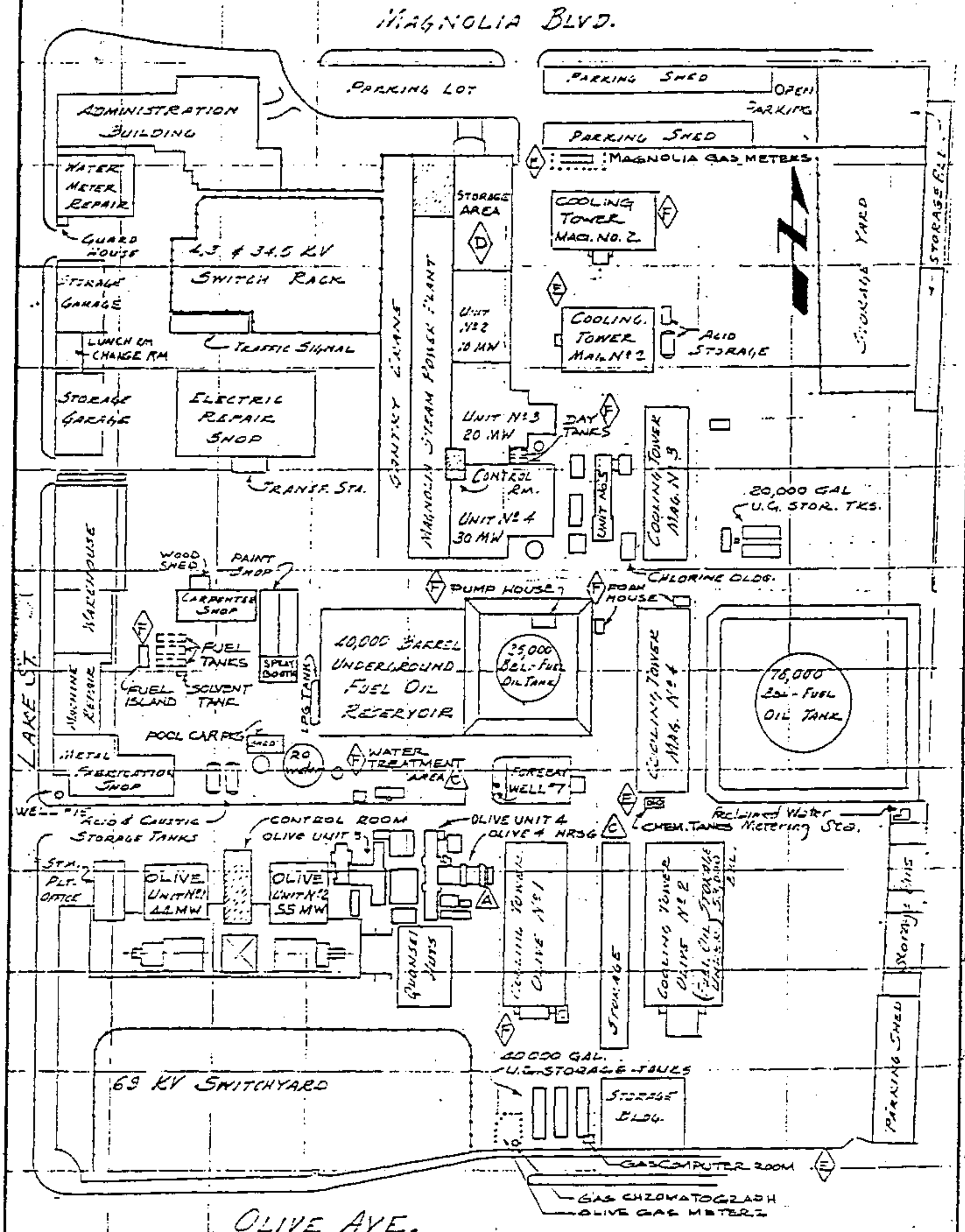
	Working Area	Area Coordinator (Alternate)	Evacuation Safety Zone (Alternate)
1.	Administration Building First Floor, West Wing (Water Engineering, Electrical Services Office, and Water Meter Shop)	Ross Burke, Senior Civil Engineer (Leighton Fong, Senior Civil Engineer)	Zone 2 Front of Change Room (Zone 1) Magnolia Parking Lot
2.	Administration Building First Floor, Main Portion (Customer Service, including Credit, Meter Readers, and Cashiers)	Teri Kaczmarek, Supervising Clerk (Bob Ysais, Sr. Meter Reader)	Zone 1 Magnolia Parking Lot (Zone 2) Front of Change Room
3.	Administration Building First Floor, East Wing (Power Resources, Administrative Services, and IBEW Office Safety & Water Conservation Office)	Mary ~~Redmann~~ WILDE, Senior Clerk (Bruno Jeider, Sr. Electrical Engineer)	Zone 1 Magnolia Parking Lot (Zone)2 Front of Change Room
4.	Administration Building Second Floor, West Wing (Power System Engineering, and Electrical Transmission and Distribution Engineering)	Dave Filson, Senior Engineering Technician (Xavier Baldwin, Sr. Electrical Engineer)	Zone 2 Front of Change Room (Zone 1) Magnolia Parking Lot
5.	Administration Building Second and Third Floors, East Wing (General Manager's Office, Division Managers, Mechanical Engineering, and Training Section)	Martin Drumm, Sr. Mechanical Engineering (Rose DeWitt, Administrative Secretary)	Zone 1 Magnolia Parking Lot (Zone 2) Front of Change Room
6.	Electrical Equipment Shop (Electrical Test Shop)	Richard Domenico, Sr. Electrician (Al Giles, Sr. Test Technician)	Zone 3 Front of Warehouse (Zone 2) Front of Change Room
7.	Electrical Distribution Superintendent Office (Electrical Distribution Employees)	Chuck Herron, Electrical Distribution Supervisor (Designated Supervisor, Line Mechanic Supervisor)	Zone 2 Front of Change Room (Zone 3) Front of Warehouse
8.	Warehouse No. 2	Robert Wong, Warehouse Supervisor (Kirt Standford, Storekeeper)	Zone 3 Front of Warehouse (Zone 4) Front of Garage
9.	Field Services (Fab Shop, Garage, and Office)	Bill Kaufmann, Equipment Maintenance Supervisor (Steve Keith, Facility Maint. Supv.)	Zone 4 Front of Garage (Zone 3) Front of Warehouse
10.	Field Service (Paint Shop, Underground Line Mechanic Shop, and Carpenter Shop)	Bob Merlo, Paint Shop Supervisor (Steve Keith, Facility Maint. Supv.) Dave Hellebrandt, Senior Conduit Mechanic)	Zone 3 Front of Warehouse (Zone 4) Front of Garage
11.	Olive Power Plant	Power Plant Shift Supervisor (Senior Control Operator)	Zone 5 Olive Control Room (Zone 6) Behind Olive No. 2 Cooling Tower

Working Area	Area Coordinator (Alternate)	Evacuation Safety Zone (Alternate)
12. Magnolia Power Plant	Power Plant Shift Supervisor (Senior Control Operator)	Zone 7 Magnolia Control Room (Zone 8) Behind Magnolia No. 3 Cooling Tower
13. SCADA Center	Jose Hurtado, Power System Superintendent (Senior Dispatcher on Duty)	Zone 9 Ralph Foy Park (Zone 10) Fire Training Center Parking Lot
14. Valley Pumping Plant	Albert Lopez, Water Supervisor (Robert Unkrich, Sr. Water Plant Operator)	Zone 11 Front Parking Lot on Hollywood Way
14. Communication Shop	Jim Floyd, Communications Technician (Dennis Gibbons, Test Technician)	Zone 3 Front of Whse. Front of Change Room

NOTE: For Escape Routes and Maps see attached sketches at the end.

APPENDIX N

ESCAPE ROUTES AND MAPS



PROJ. NO. 33-S JOB ORDER NO. 5301 SPEC. NO. 976

NO.	REVISIONS	BY	CHECK	APP'D	DATE
F	MISCELLANEOUS REVISIONS	TDG	[illegible]	[illegible]	1-5-91
E	[illegible]	TDG	[illegible]	[illegible]	11-29-91
D	MAGNOLIA UNIT 1 DEMOLISHED	KWC	KWC	KWC	7-17-89

DRAWN J.E.H. | SCALE 3/32"=100' | CHECK | APP'D J.D.W. | DATE 12-4-68

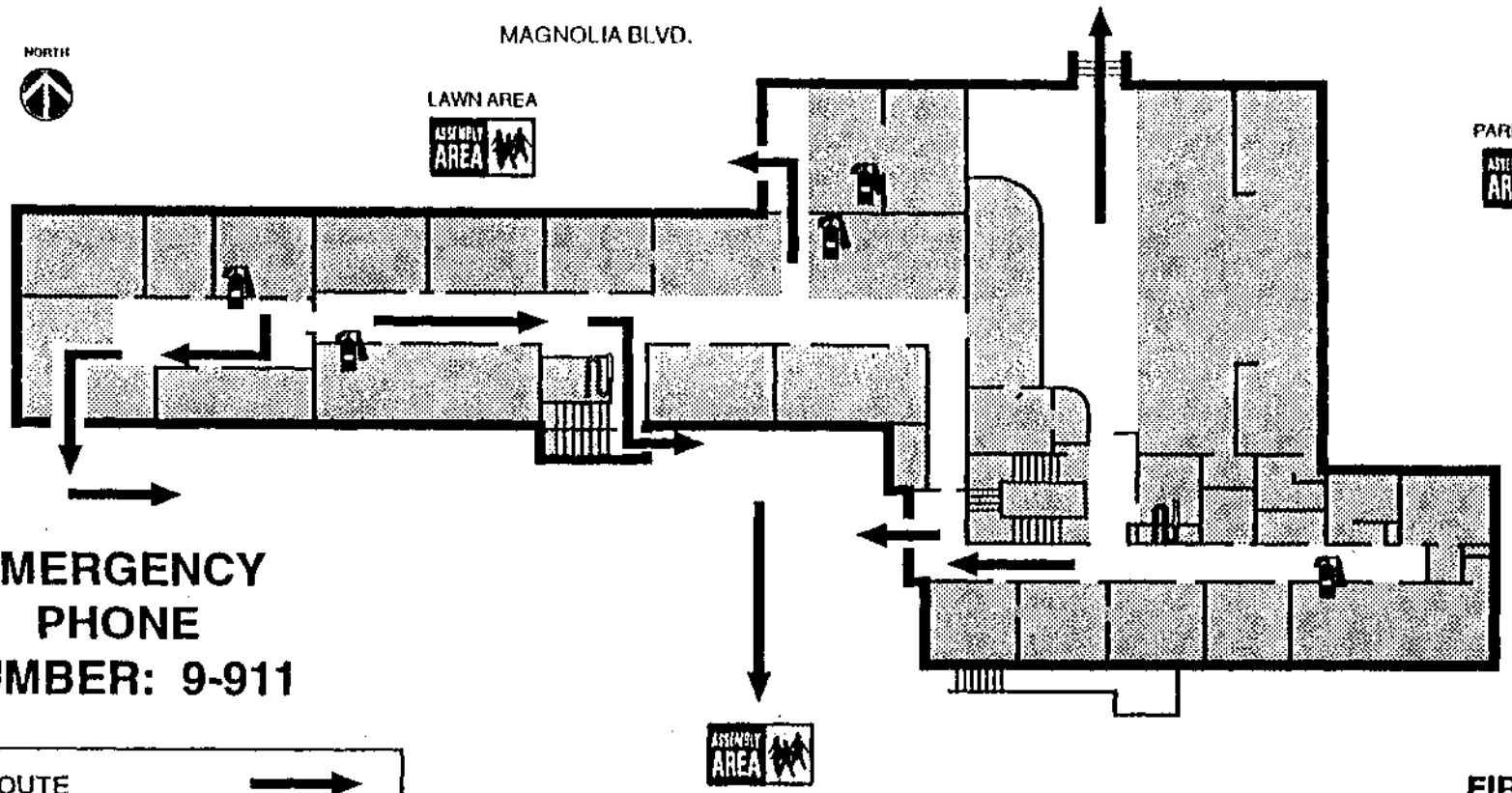
CITY OF BURBANK
PUBLIC SERVICE DEPARTMENT

YARD PLOT PLAN

DRAWING NO. AM-108F

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit. Then Proceed to Outside Assembly Area.



EMERGENCY PHONE NUMBER: 9-911

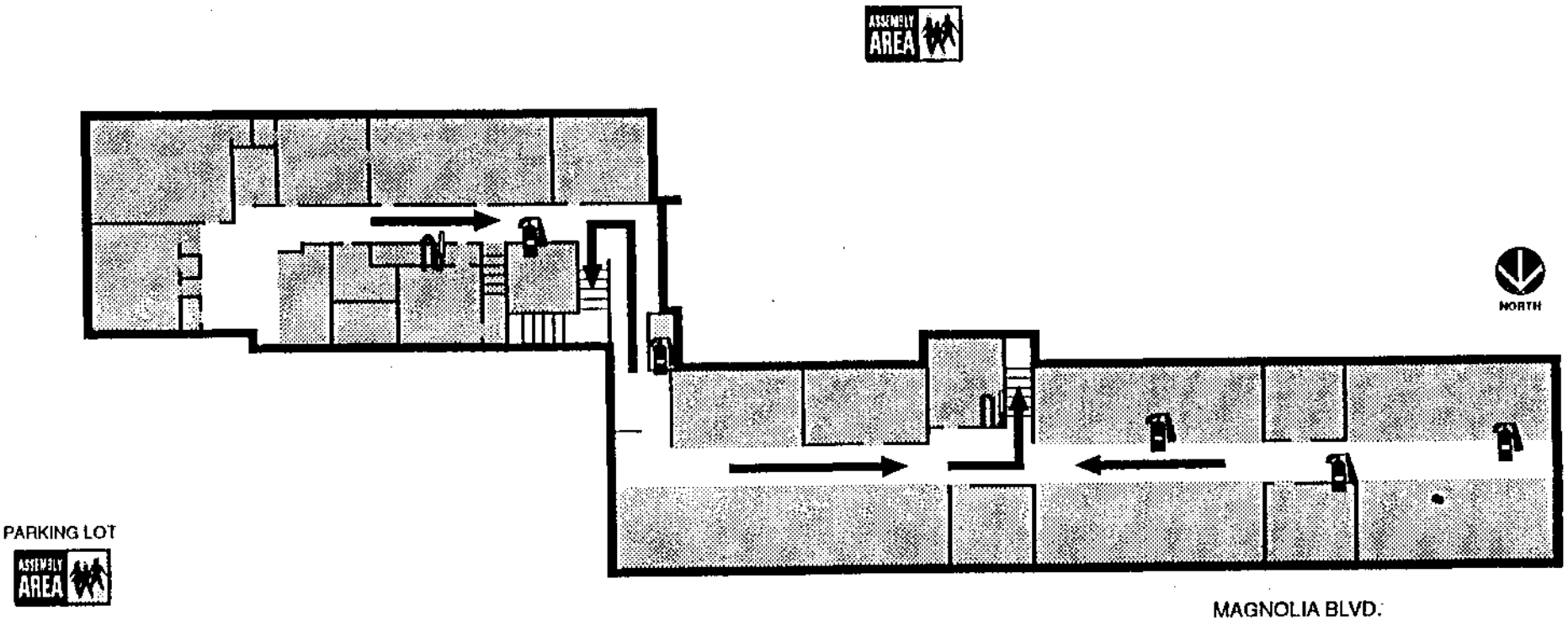
EXIT ROUTE	→
FIRE HOSE	
FIRE EXTINGUISHER	

7/95, For Updates call Protection Displays, (818) 852-4044 #AB 13

FIRST FLOOR
Administration Building
Public Services Department
164 West Magnolia Blvd.
Burbank, California

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit. Then Proceed to Outside Assembly Area.



SECOND FLOOR
Administration Building
Public Services Department
164 West Magnolia Blvd.
Burbank, California

7/95, For Updates call Protection Displays, (818) 952-4044 #AB 2 2

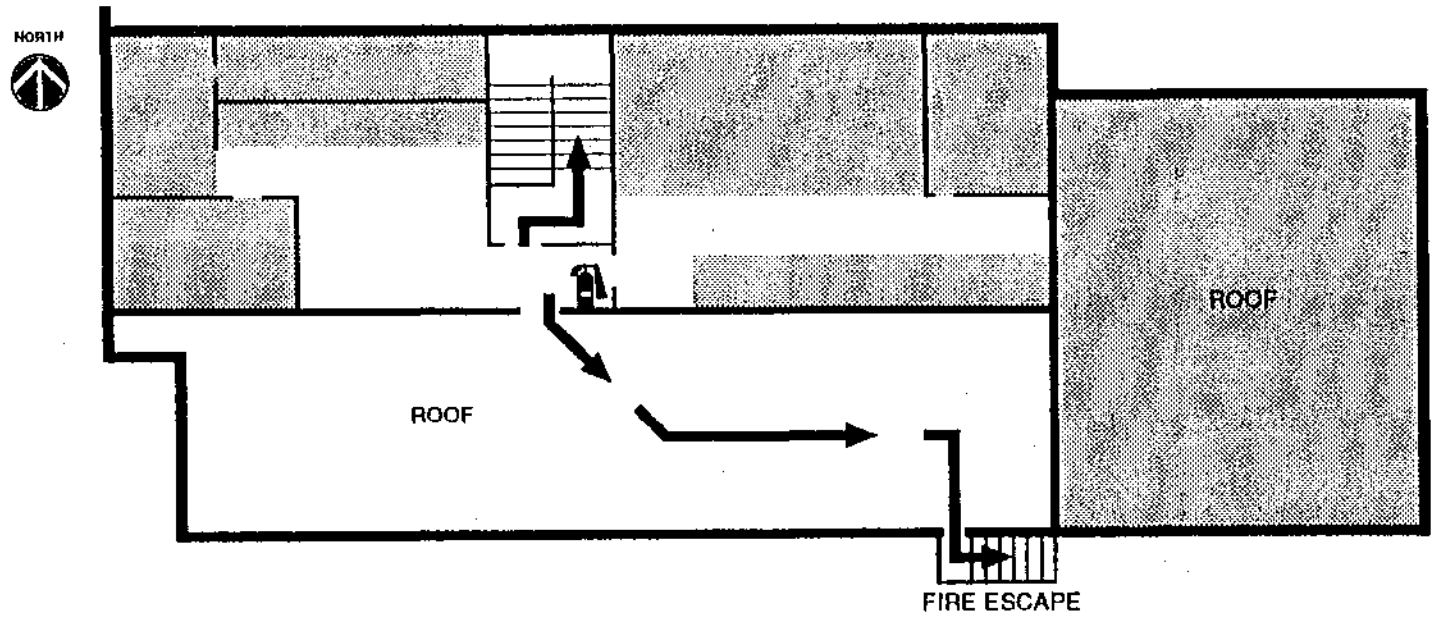
EMERGENCY PHONE NUMBER: 9-911

EXIT ROUTE
FIRE HOSE
FIRE EXTINGUISHER

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit. Then Proceed to Outside Assembly Area.

MAGNOLIA BLVD.



ASSEMBLY AREA

THIRD FLOOR
Administration Building
Public Services Department
164 West Magnolia Blvd.
Burbank, California

7/95. For Updates call Protection Displays. (818) 952-4044 #AB 3 F

EMERGENCY PHONE NUMBER: 9-911

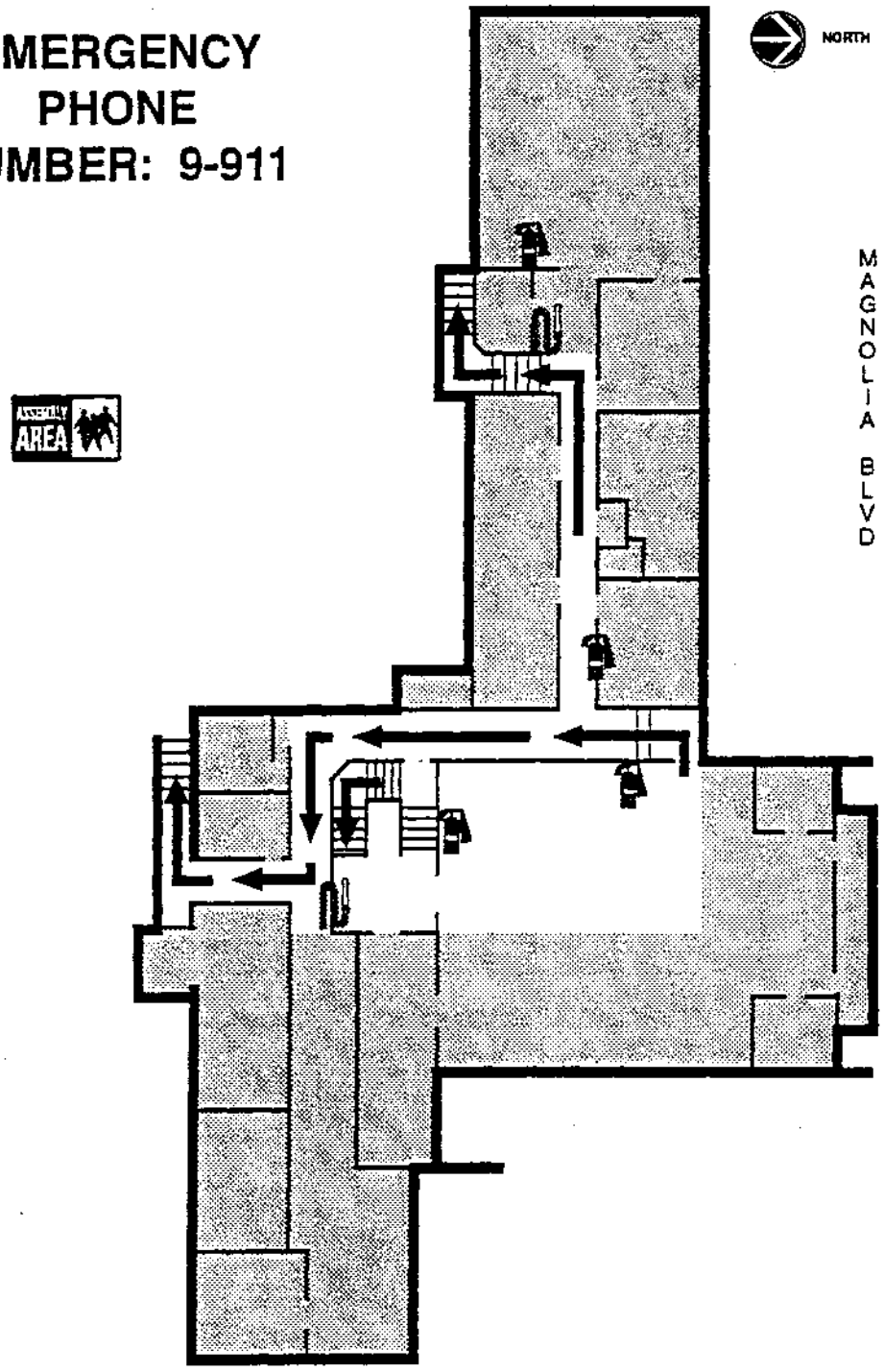
EXIT ROUTE

FIRE EXTINGUISHER

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.

EMERGENCY PHONE NUMBER: 9-911



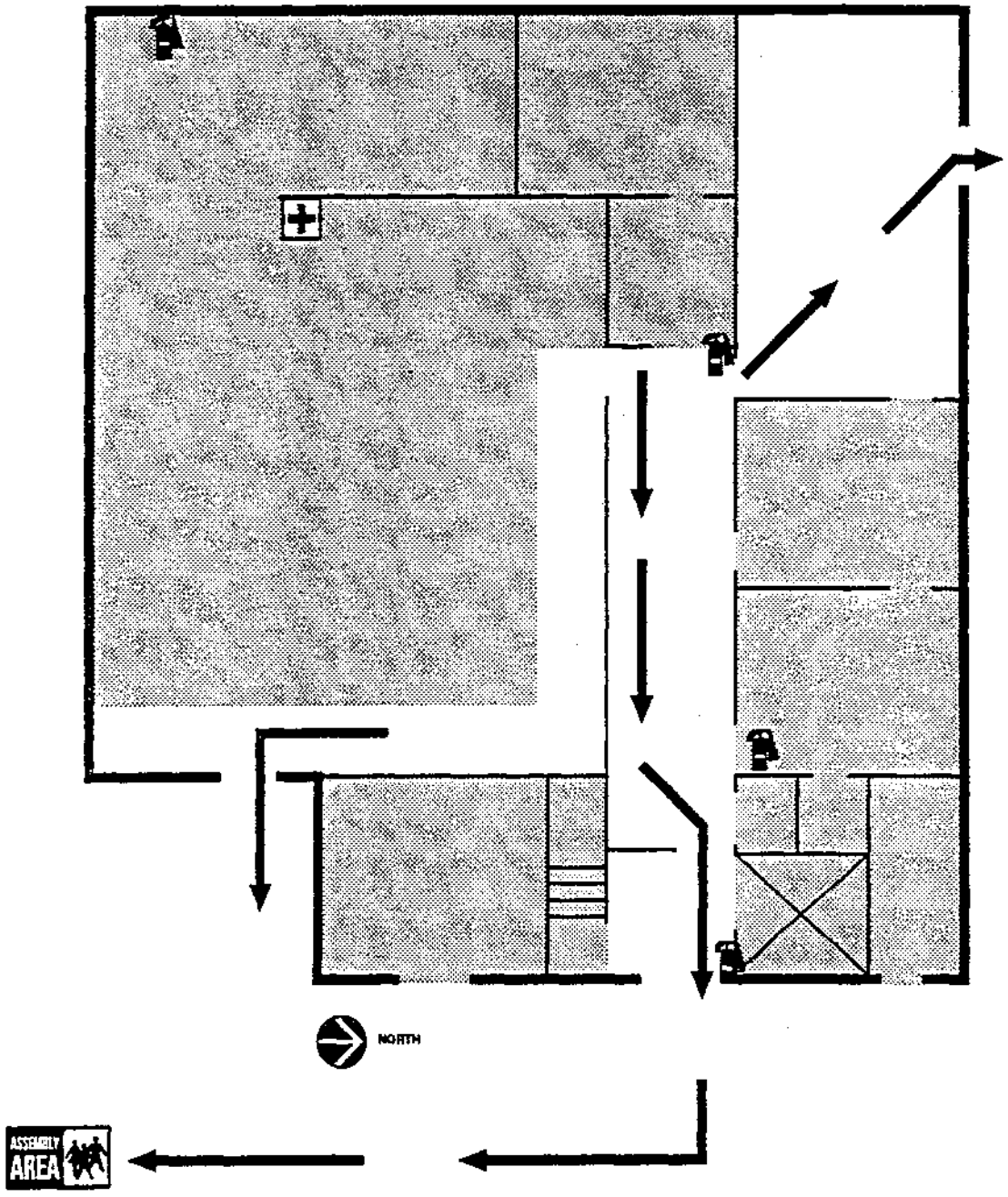
BASEMENT
Administration Building
Public Services Department
164 West Magnolia Blvd.
Burbank, California

EXIT ROUTE	→
FIRE HOSE	
FIRE EXTINGUISHER	

7/95. For Updates call Protection Displays, (818) 852-4044 #AB 8.5

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.



EMERGENCY PHONE NUMBER: 9-911

GROUND LEVEL
Water Meter
Repair Shop
164 West Magnolia Blvd.
Burbank, California

EXIT ROUTE

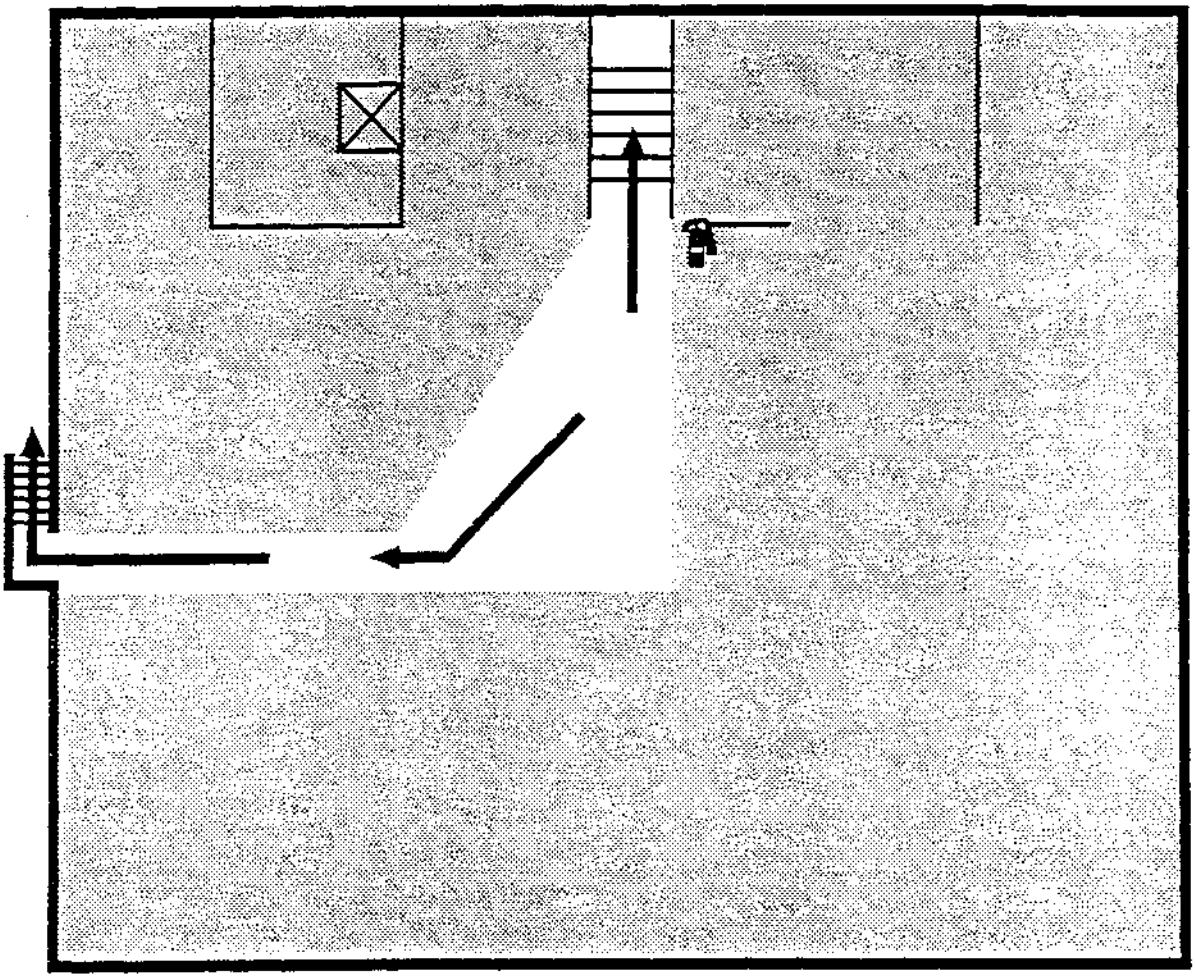
FIRE EXTINGUISHER

FIRST AID KIT

7/95. For Updates call Protection Displays (818) 952-4044 #WM 1.1

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.



NORTH

EMERGENCY PHONE NUMBER: 9-911

BASEMENT
Water Meter
Repair Shop
164 West Magnolia Blvd.
Burbank, California

EXIT ROUTE

FIRE EXTINGUISHER

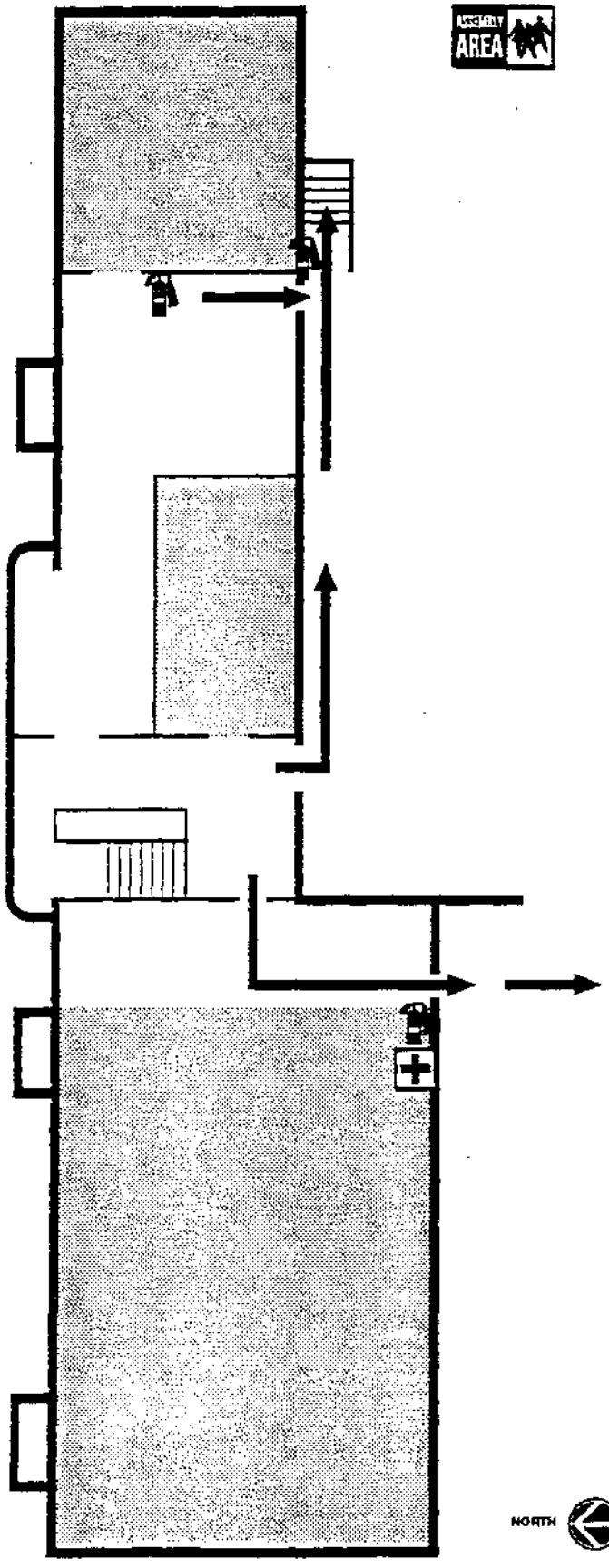
EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.

EXIT ROUTE

FIRE EXTINGUISHER

FIRST AID KIT

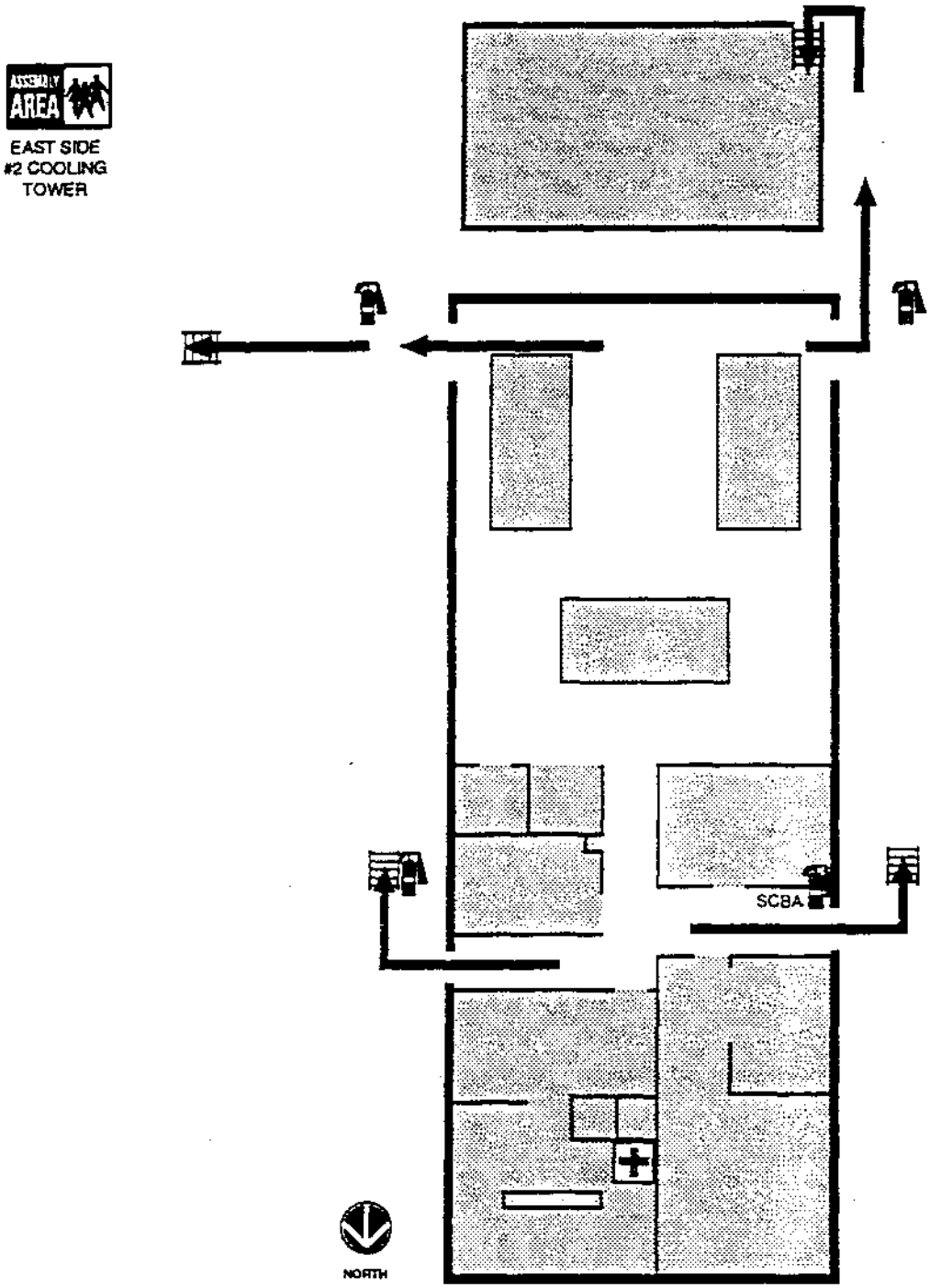


EMERGENCY PHONE NUMBER: 9-911

Magnolia
Dispatch Center
164 West Magnolia Blvd.
Burbank, California

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.



EMERGENCY PHONE NUMBER: 9-911

Olive
Control Room
164 West Magnolia Blvd.
Burbank, California

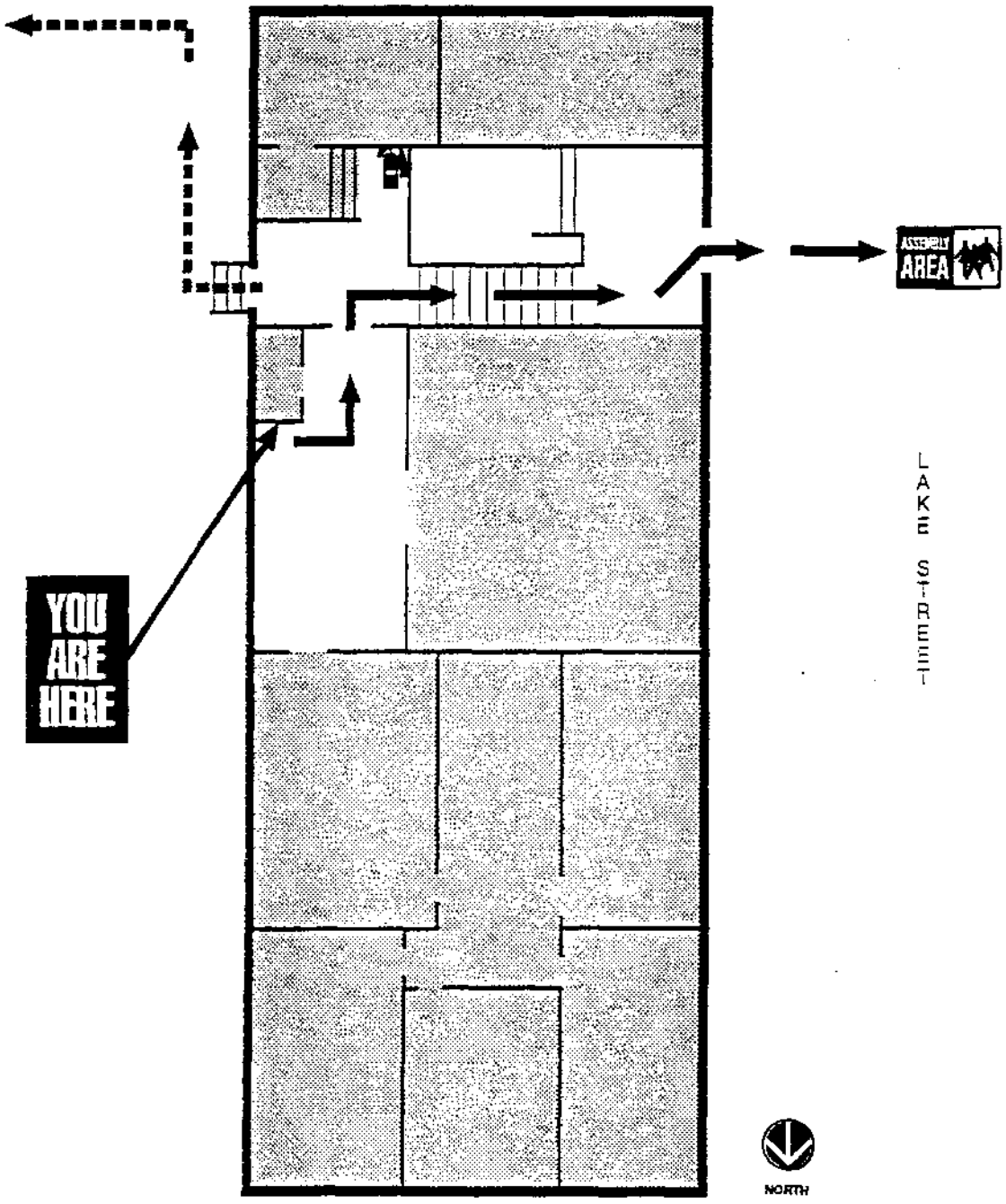
EXIT ROUTE

FIRE EXTINGUISHER

FIRST AID KIT

EMERGENCY EVACUATION PLAN

Follow Green Arrows to Exit.
Proceed to Outside Assembly Area.

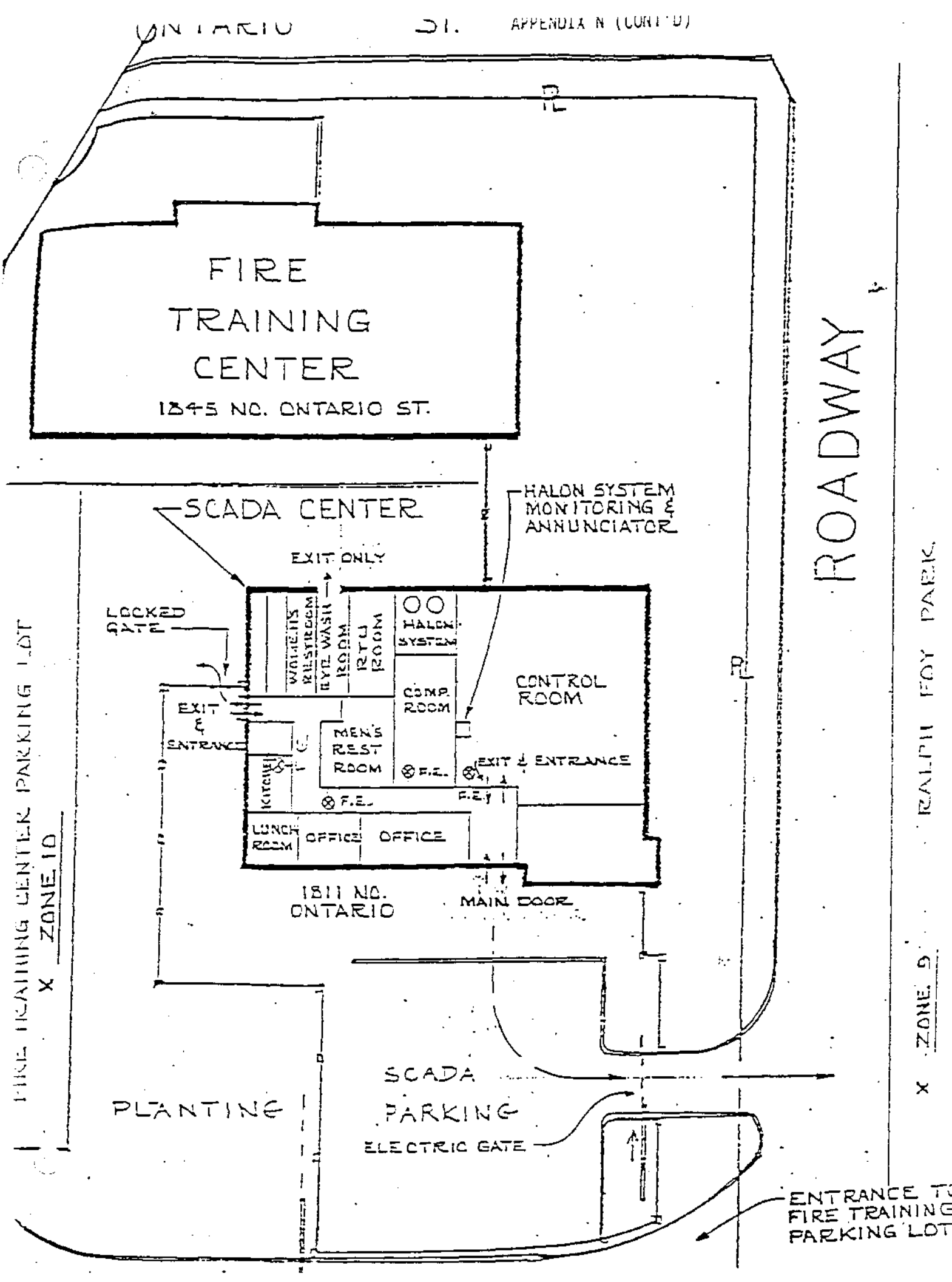


EMERGENCY PHONE NUMBER: 9-911

Olive Steam Plant Office
164 West Magnolia Blvd.
Burbank, California

EXIT ROUTE

FIRE EXTINGUISHER


ONTARIO ST.
FIRE TRAINING CENTER
1845 NO. ONTARIO ST.
SCADA CENTER
HALON SYSTEM MONITORING & ANNUNCIATOR
EXIT ONLY
LOCKED GATE
WOMEN'S RESTROOM
EYE WASH ROOM
RTU ROOM
HALON SYSTEM
COMP. ROOM
CONTROL ROOM
EXIT & ENTRANCE
MEN'S REST ROOM
KITCHEN
F.E.
EXIT & ENTRANCE
LUNCH ROOM
OFFICE
OFFICE
1811 NO. ONTARIO
MAIN DOOR
ROADWAY
RALPH FOY PARK
FIRE TRAINING CENTER PARKING LOT
X ZONE 10
X ZONE 9
PLANTING
SCADA PARKING
ELECTRIC GATE
ENTRANCE TO FIRE TRAINING PARKING LOT

APPENDIX "O"

RECOMMENDED PRIORITY LIST OF CRITICAL CIRCUITS IN THE ORDER FOR ELECTRICAL POWER IN CASE OF A DISASTER

Sr. No.	Description of Facility	Feeder/Station
1.	Power Plant Auxiliaries	Magnolia and Olive Power Plants
2.	E.O.C. and SCADA Center	V-8
3.	PSD Yard	B-1
4.	City Hall, Fire Dept. Headquarter Building and Telephone Co. Customer Station 3027	S-14
5.	Police Building, Central Library and Thompson Memorial Hospital	T-4
6.	Saint Joseph Hospital	N-2, N-10, N-22
7.	KNBC - 3000 W. Alameda	NBC Substation
8.	KROQ Radio Station	HW-10
9.	Radio Repeater Station near Reservior #1	T-21
10.	Radio Repeater Station at 3900 W. Alameda	HW-5
11.	PWD Yard at Lake Street	B-2
12.	Red Cross Shelter McCambridge Park Rec. Ctr. (or any other shelters)	M-7
13.	FAA Control Tower	W-10
14.	FAA Radar Tower	C-4
15.	B-G-P Airport (Terminal Bldg.)	GS-11
16.	B-G-P Airport Runways	W-7
17.	Critical Patient Feeders	See attached list
18.	MWD B-1 Connection Kenneth Road and Tujunga	T-7 (Already covered under Critical Patient feeder 17.w)

RECOMMENDED PRIORITY LIST OF CRITICAL CIRCUITS

Sr. No.	Description of Facility	Feeder/Station
19.	MWD B-2 Connection Keystone and Olive	N-21 (Already covered under Critical Patient feeder 17.q)
20.	MWD B-3 Connection Hollywood Way & Olive	A-1
21.	Well No. 6 Jeffries and Maple St.	V-13 (already covered under Critical Patient feeder 17.ag
22.	MWD B-5 Connection Gregg and San Fernando Road	---
23.	Valley Pumping Plant (only if sufficient MWD water is not available)	G-9
24.	GAC Facility (only if sufficient MWD water is not available)	B-19
25.	Water Reclamation Plant	B-14
26.	Media City Center (If between 9 a.m. & 9 p.m.)	S-6, S-10
27.	Fourteen most critical Traffic Signals	see attached list
28.	Hughes Market 1100 N. San Fernando Blvd.	M-4
29.	Von's Company 1013 N. San Fernando Blvd.	M-14 (already covered under critical traffic signal list)
30.	Sav-on Drugs 1015 N. San Fernando Blvd.	M-14 (already covered under critical traffic signal list)
31.	Hughes Market 1028 S. San Fernando Blvd.	F-10
32.	Von's Pavilion 1110 W. Alameda Ave.	F-2

Sr. No.	Description of Facility	Feeder/Station
33.	Sav-on Drugs 1011 W. Alameda Ave.	B-3
34.	Lucky Grocery Store 3830 W. Verdugo Ave.	A-96
35.	Sav-on Drugs 511 N. Hollywood Way	A-97 (already covered under critical patient and traffic signal list 17.e)
36.	Von's Company 1820 W. Verdugo Ave.	B-8 (already covered under critical traffic signal list
37.	Ralph's Market 2500 W. Victory Blvd.	V-9

NOTE: All of these priority circuits can be energized only if enough generation is available, voltage and frequency can be maintained close to normal, and there is no physical damage to electrical equipment in the station and in the field and it is safe to energize.

APPENDIX "O" CONT'D

LIST OF CRITICAL PATIENT FEEDERS
AS OF JUNE 1, 1995

Sr. No.	Feeder	
17 a.	A-5	
b.	A-7	
c.	A-10	
d.	A-11	
e.	A-97	
f.	B-2	(already covered under service to PWD yard)
g.	B-7	
h.	B-11	
i.	B-21	
j.	B-22	
k.	B-24	
l.	F-2	
m.	F-3	
n.	F-14	
o.	M-2	
p.	N-1	
q.	N-21	
r.	P-17	
s.	S-14	(already covered under service to City Hall)
t.	S-6	
u.	T-1	
v.	T-2	
w.	T-7	
x.	T-10	

Sr. No.	Feeder	
y.	T-16	
z.	T-17	
aa	T-19	
ab	T-20	
ac	T-21	(already covered under Radio Repeater Station near Reservoir #1)
ad	V-1	
ae	V-3	
af	V-4	
ag	V-13	
ah	V-14	

34 circuits at this time

PRIORITY LIST OF 14 CRITICAL TRAFFIC SIGNALS AND INTERSECTIONS

Sr. No.	Description of Location	Feeder
27 a.	Burbank Blvd., Victory Pl. and Victory Blvd.	B-14 (already covered under Water Reclamation Plant)
b.	San Fernando Blvd., Scott Rd. and Amherst Dr.	M-14
c.	Olive Ave., Sparks St., and Verdugo Ave.	B-8
d.	Glenoaks Blvd., Scott Rd., Eton Dr. and Payton Ave.	M-2 (already covered under critical patient list 17.o)
e.	Alameda Ave. and Olive Ave.	A-9
f.	Alameda Ave. and Hollywood Way	A-97 (already covered under critical patient list 17.e)
g.	Buena Vista and San Fernando Blvd.	W-14
h.	Alameda Ave. and Victory Blvd.	B-7 (already covered under critical patient list 17.g)
i.	Buena Vista and Vanowen St.	P-16
j.	Hollywood Way and Thortnton Ave.	W-10 (already covered under FAA Control Tower)
k.	Hollywood Way and Chandler	V-2
l.	Buena Vista and Chandler	V-7
m.	Alameda Ave. and Pass Ave.	A-7
n.	Victory Blvd. and Chandler	B-4

APPENDIX "P"
ORANGE CHANNEL 1
RADIO NUMBERS - WATER/FIELD SERVICES DIVISIONS

RADIO #	TITLE	NAME
160	Field Services Manager	John Ostly
161	Construction Superintendent	Pete Erickson
153	Equip. Maintenance Supervisor	Bill Kaufmann
Control 23	Water Office	Office Personnel
130	Water Prod./Oper. Supt.	Bill Smith
111	Water Maint./Const. Supt.	John Edmondson
112	Water Supervisor	Joe Meythaler
134	Water Supervisor	Al Lopez
144	Water Lead Worker	Steve Sinardi
113	Water Lead Worker	Pete Marshall
116	Water Lead Worker	Randy Hardin
121	Water Tool Truck	Service Crew
117	Water Tool Truck	Construction Crew
120	Water Tool Truck	Construction
115	Water Distribution	
118	Water Distribution	
119	Water Meter Shop	Marva-Lea Kornblatt
122	Water Meter Shop	
133	Valley Tool Truck	Dan McMasters
131	Pump Operator	
132	Pump Operator	
114	Valve Truck	

ORANGE CHANNEL #2
RADIO NUMBERS - ELECTRIC DIVISION

RADIO	TITLE	NAME
1	General Manager	Ronald Stassi
2	Asst. General Mgr.	Greg Simay
22	Elec. Dist. Supt.	Chuck Herron
6	Elec. Equipt. Supt.	Hanes Isaacs
69	Elec. Test Supt.	Richard Andersen
101	Elec. Test Supt.	Jack Wildermuth
Control 10	Elect./Eng. Office	Office Personnel
Control 12	SCADA Center	SCADA Center Personnel
Car 55	SCADA Center Personnel	
20	Line Mechanic Supv.	Ron McKinney
18	Line Mechanic Supv.	Curtis Andersen
61	Line Mechanic Supv.	Bob Greenquist
67	Line Mechanic Supv.	Gene Stoddard
34	Line Mechanic Supv.	Jerry Trantham
7	Line Mechanic Supv.	Roy Meyer
35	Electrical Supv.	Rick Ainsworth
24	Electrical Supv.	Eugene Miller
59	Electrical Supv.	Frank Salzberg
87	Electrical Supv.	Kent Vest
58	Electrical Supv.	John Patterson
[illegible]	Electrical Supv.	Blaine Rowland
23	Test Shop	Service Truck
79	Test Shop	Service Truck